

LIMITED SCOPE TRAFFIC IMPACT ANALYSIS

BEE CANYON GREENERY
IRVINE, CALIFORNIA
PLANNING AREA 3

This Limited Scope Traffic Impact Analysis has been prepared under the supervision of
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Signed A. Mukherjee 06/21/19



LSA

June 21, 2019

LIMITED SCOPE TRAFFIC IMPACT ANALYSIS

**BEE CANYON GREENERY
IRVINE, CALIFORNIA
PLANNING AREA 3**

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EXECUTIVE SUMMARY

The purpose of this Limited Scope Traffic Impact Analysis (TIA) is to determine short-term traffic impacts resulting from the proposed Bee Canyon Greenery composting operation at the Frank R. Bowerman (FRB) Landfill at 11002 Bee Canyon Access Road in Planning Area 3 (Limestone Canyon – Open Space) of Irvine, California.

The existing FRB Landfill site (located in Traffic Analysis Zone [TAZ] 20) receives approximately 850 tons per day of processed green material (PGM). The proposed Bee Canyon Greenery operation would compost approximately 595 tons of PGM per day on site. Because the PGM is already coming into the FRB Landfill, no additional traffic would be generated for the intake of PGM. However, after the composting process is complete, 595 tons of compost would be delivered to markets inside and outside Orange County. The daily compost delivery would require approximately 30 dump trucks, generating 60 average daily trips (ADT). The designated truck route to/from the FRB Landfill and regional locations is Interstate 5 (I-5), Sand Canyon Avenue, Portola Parkway, and Bee Canyon Access Road.

The existing FRB Landfill is open from 7:00 a.m. to 5:00 p.m., Monday through Saturday. The proposed Bee Canyon Greenery would have the same hours of operation. To present a conservative, worst-case estimate for trip generation of the Bee Canyon Greenery project (project), it is assumed that approximately 25 percent of the truck trips would occur during the peak-hour periods. This is equivalent to approximately 60 ADT, with 8 trips in the a.m. peak hour (4 inbound and 4 outbound) and 8 trips in the p.m. peak hour (4 inbound and 4 outbound). The remaining 44 trips (22 inbound and 22 outbound) would occur outside the peak-hour periods.

This study focuses on the a.m. peak-hour and p.m. peak-hour levels of service (LOS) at seven intersections. Project impacts were determined based on an analysis of the following scenarios:

- Short-Term Interim Year Approved Baseline
- Short-Term Interim Year Approved Plus Project
- Short-Term Interim Year Pending Baseline
- Short-Term Interim Year Pending Plus Project

On the basis of the results of this analysis, the project can be implemented without impacting the design or operation of the surrounding roadway system. An evaluation of intersection LOS shows that the addition of project traffic to the Short-Term Interim Year conditions would not significantly impact the study area intersections, according to the City of Irvine performance criteria.

Project access was analyzed based on the City's Transportation Design Procedures (TDPs, adopted in February 2007). As a result, no impacts to vehicle access were identified using the following TDPs:

- **TDP-1:** Turn-Lane Pocket Lengths
- **TDP-14:** Driveway Lengths

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LIST OF ABBREVIATIONS AND ACRONYMS

ADT	average daily traffic
City	City of Irvine
FRB	Frank R. Bowerman
ft	foot/feet
I-5	Interstate 5
ICU	intersection capacity utilization
ITAM	Irvine Transportation Analysis Model
LOS	level(s) of service
mph	miles per hour
PGM	processed green material
project	Bee Canyon Greenery project
TAZ	Traffic Analysis Zone
TDP(s)	Transportation Design Procedure(s)
TIA	Traffic Impact Analysis
v/c	volume-to-capacity

LIMITED SCOPE TRAFFIC IMPACT ANALYSIS BEE CANYON GREENERY

LSA has prepared the following Limited Scope Traffic Impact Analysis (TIA) to identify the short-term traffic impacts resulting from the proposed Bee Canyon Greenery composting operation at the Frank R. Bowerman (FRB) Landfill at 11002 Bee Canyon Access Road in Planning Area 3 (Limestone Canyon – Open Space) of Irvine, California. LSA has prepared this analysis consistent with the approved scope of work, dated May 7, 2019 (Appendix A). This Limited Scope TIA was prepared in accordance with the applicable sections of the City of Irvine (City) *Traffic Impact Analysis Guidelines* (adopted by the City Council on August 24, 2004) and the City's Transportation Design Procedures (TDPs).

INTRODUCTION

Project Site

Figure 1 shows the project site location. The existing FRB Landfill site (located in Traffic Analysis Zone [TAZ] 20) receives approximately 850 tons per day of processed green material (PGM). The proposed Bee Canyon Greenery operation would compost approximately 595 tons of PGM per day on site. Because the PGM is already coming into the FRB Landfill, there would be no additional traffic generated for the intake of PGM. However, after the composting process is complete, 595 tons of compost would be delivered to markets inside and outside Orange County. The daily compost delivery would require approximately 30 dump trucks, generating 60 average daily traffic (ADT). The designated truck route to/from the FRB Landfill and regional locations is Interstate 5 (I-5), Sand Canyon Avenue, Portola Parkway, and Bee Canyon Access Road. Figure 2 illustrates a site plan of the project.

The existing FRB Landfill is open from 7:00 a.m. to 5:00 p.m., Monday through Saturday. The proposed Bee Canyon Greenery would have the same hours of operation.

Study Area Boundary

As shown on Figure 1, the study area includes the following intersections:

1. Bee Canyon Access Road/Portola Parkway
2. Sand Canyon Avenue/Portola Parkway
3. Sand Canyon Avenue/Irvine Boulevard
4. Sand Canyon Avenue/Trabuco Road–Great Park Boulevard
5. Sand Canyon Avenue/I-5 northbound ramps
6. Sand Canyon Avenue/Marine Way
7. Sand Canyon Avenue/I-5 southbound ramps

Existing, General Plan, and Proposed Site Uses

The current City of Irvine General Plan (2015) designation for the project site is Recreation with Landfill Overlay. The current zoning is 1.7: Landfill Overlay.

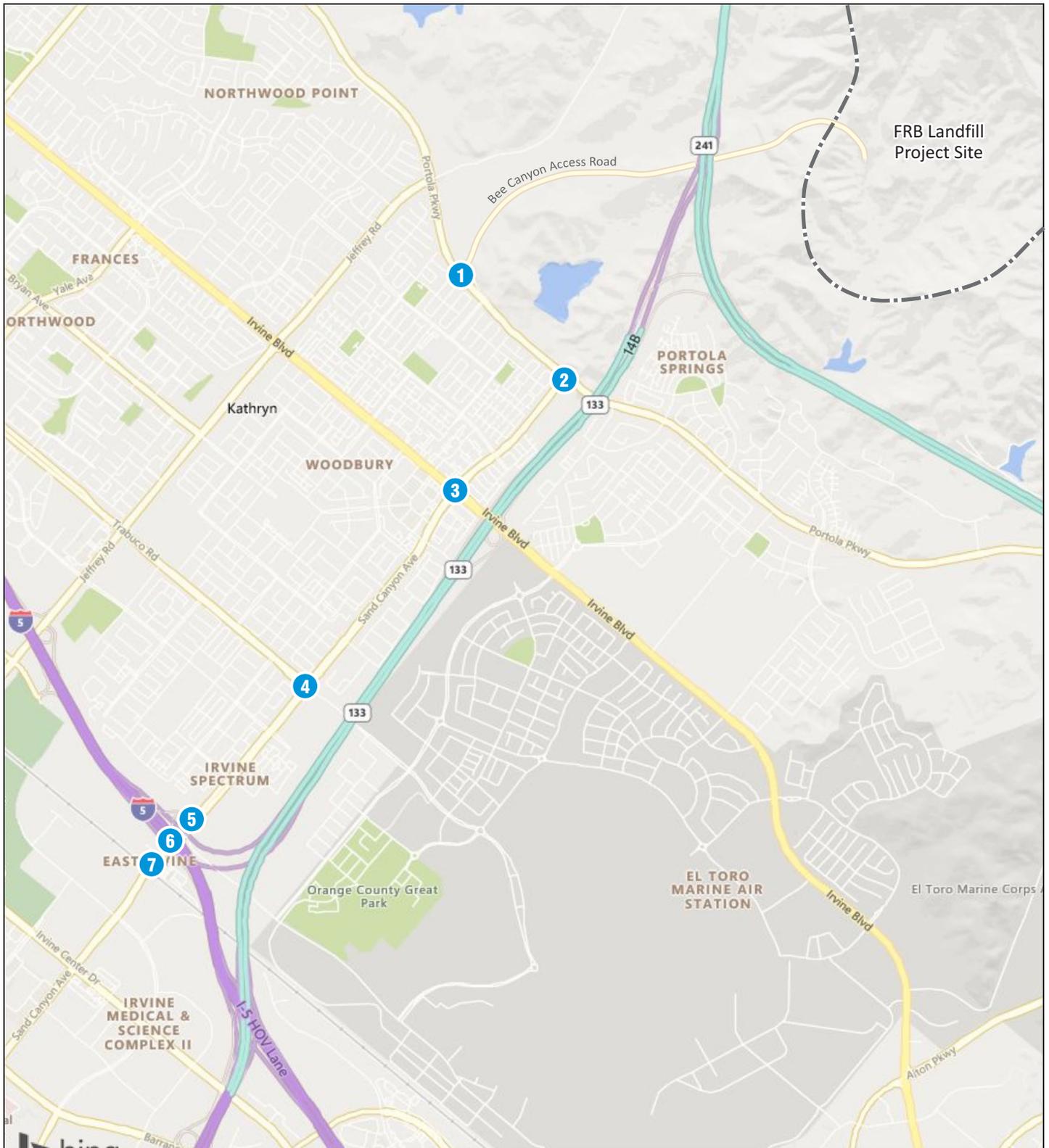
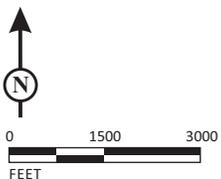


FIGURE 1

LSA

LEGEND

- Study Area Intersection



SOURCE: Bing Maps

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Bee Canyon Greenery
Project Location and
Study Area Intersections

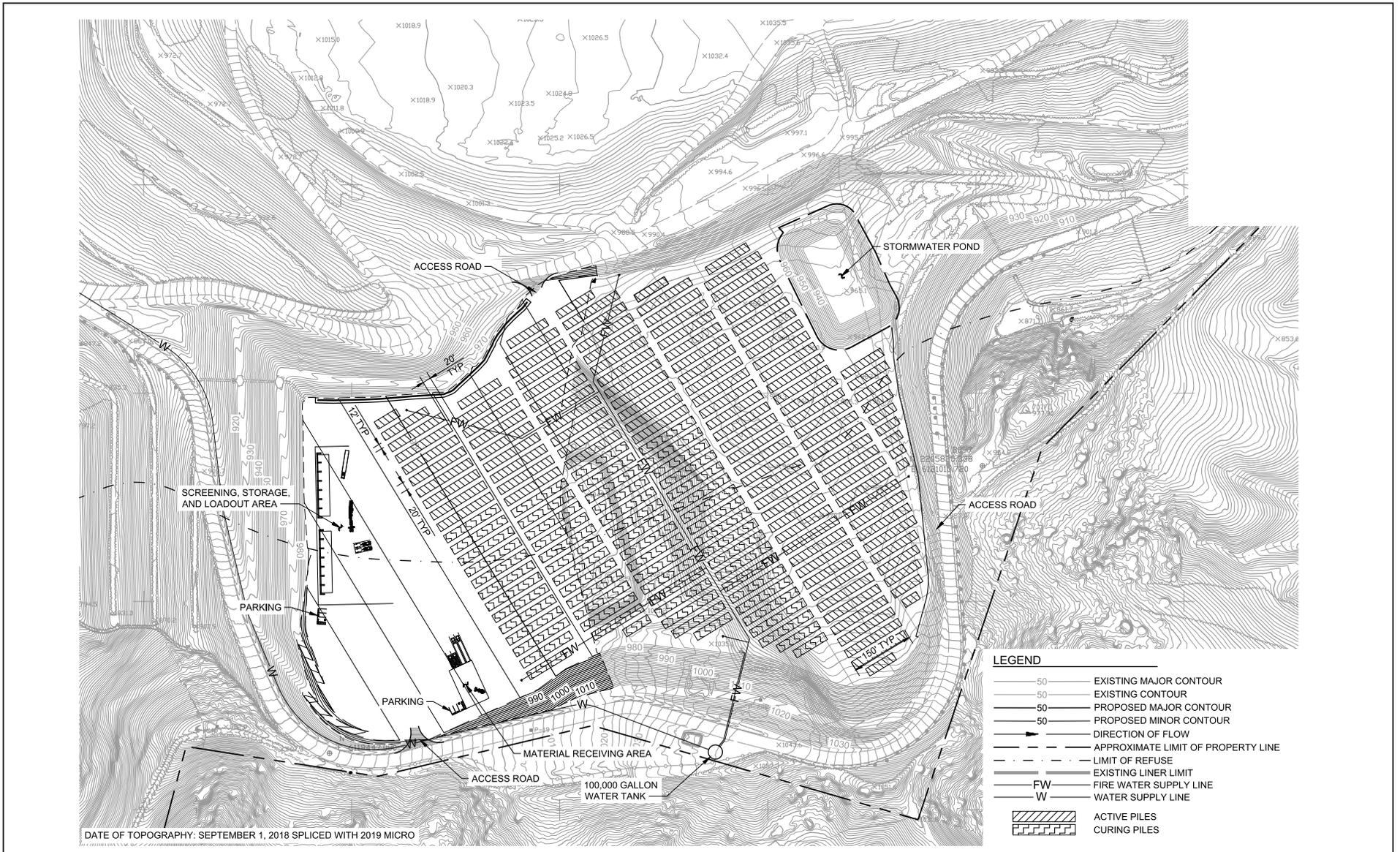


FIGURE 2

LSA



SOURCE: Tetra Tech/BAS (3/2019)

I:\OCY1701.09\G\Site Plan.cdr (6/18/2019)

Bee Canyon Greenery

Site Plan

PERFORMANCE CRITERIA

To determine the peak-hour operations at signalized intersections in the study area, the intersection capacity utilization (ICU) methodology was used. The ICU methodology compares the volume-to-capacity (v/c) ratios of conflicting turn movements at an intersection, sums these critical conflicting v/c ratios for each intersection approach, and determines the overall ICU. The resulting ICU is expressed in terms of level of service (LOS), where LOS A represents free-flow activity and LOS F represents overcapacity operation. Parameters set by the City for ICU calculations, including lane capacity, right-turn treatment, and clearance interval, are included in this analysis.

According to the City's *Traffic Impact Analysis Guidelines* and consistent with the City's General Plan, LOS at an intersection or roadway is considered unsatisfactory when the ICU exceeds 0.90 (i.e., LOS E or F). The following table demonstrates the relationship of ICU to LOS.

Level of Service	ICU
A	0.00–0.60
B	0.61–0.70
C	0.71–0.80
D	0.81–0.90
E	0.91–1.00
F	> 1.00

Source: City of Irvine *Traffic Impact Analysis Guidelines* (2004).
ICU = intersection capacity utilization

Using the City's adopted methodologies (ICU for signalized intersections), a project impact would occur if the project causes a signalized intersection to exceed the acceptable LOS or if the signalized intersection in question exceeds the acceptable LOS and the impact of development is greater than or equal to 0.02.

The project driveway is analyzed based on the design criteria recommended in the City's TDPs. The TDPs establish uniform policies and procedures for reviewing traffic design plans in Irvine. The TDPs were used to evaluate the roadway design features that may be impacted by the project. A description and an analysis of each applicable design criterion are provided later in this Limited Scope TIA.

ANALYSIS METHODOLOGY AND APPROACH

The future baseline (no project) conditions were developed based on the latest Irvine Transportation Analysis Model (ITAM). The future baseline peak-hour traffic volumes for the study area intersections in ITAM were extracted. For the intersection of Bee Canyon Access Road/Portola Parkway, which is not currently in ITAM, existing peak-hour counts were conducted on May 21, 2019, to determine the turn volumes into and out of Bee Canyon Access Road. The Bee Canyon Access Road volumes were not adjusted for growth because the road only provides access to and from the FRB Landfill. Therefore, the existing Bee Canyon Access Road volumes were used for the future baseline volumes. The future baseline volumes at the adjacent arterial intersection of Sand Canyon Avenue/Portola Parkway were used to develop the future through volumes along Portola Parkway.

The “approved” condition represents the planned growth for the City per the General Plan, as well as each application for development currently approved by the City. The “pending” condition represents the planned growth for the City per the General Plan, as well as all the projects in the City that are approved but not yet built and are currently under review. The plus project conditions were determined by manually assigning the project trip generation to their respective baseline conditions at the study intersections.

The future conditions are based on the funded roadway network and land use assumptions envisioned to be in place by the short-term interim year. This future traffic analysis requires two ITAM runs. These ITAM runs are examined without the project in the approved and pending development scenarios.

LSA prepared the forecast data for this project based on the latest version of ITAM. The scenarios examined for the future condition are as follows:

- **Short-Term Interim Year Approved Baseline:** The ITAM 2023 run (Y23-15 or higher) includes the impacts of each application for development approved by the City. Any additional development beyond the existing uses for the project that might be assumed in ITAM were deleted for the analysis of this scenario.
- **Short-Term Interim Year Pending Baseline:** The ITAM 2023 run (Y23-15 or higher) includes the impacts of each application for development approved and under review by the City. Any additional development beyond the existing uses for the project that might be assumed in ITAM were deleted for the analysis of this scenario.

Project impacts are identified at study area intersections for the approved and pending baseline conditions, assuming improvements to the circulation system identified by the City. Traffic volumes and LOS calculations for the approved and pending baseline and plus project scenarios are referenced throughout this Limited Scope TIA and are provided in Appendix B.

PROPOSED PROJECT TRAFFIC

Trip Generation

The trip generation from the project is based on operational information from OC Waste & Recycling. As previously described, daily compost delivery would require 30 trucks. In order to present a conservative, worst-case estimate for trip generation of the project, it is assumed that approximately 25 percent of the truck trips would occur during the peak-hour periods.

As shown in Table A, the project would generate 60 ADT, with 8 trips in the a.m. peak hour (4 inbound, 4 outbound) and 8 trips in the p.m. peak hour (4 inbound, 4 outbound). The remaining 44 trips (22 inbound, 22 outbound) would occur outside the peak-hour periods.

Table A: Project Trip Generation

Trip Type	Quantity	ADT	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Trucks	30	60	4	4	8	4	4	8

Source: OC Waste & Recycling (May 2019).
 ADT = average daily trips

For the approved and pending plus project conditions, the project trips have been added to the short-term interim year approved and pending baseline conditions, respectively.

Trip Distribution and Assignment

The directions of approach to and departure from the site are based on operational information from OC Waste & Recycling and the City’s designated truck routes (e.g., Sand Canyon Avenue, Portola Parkway, and I-5). Approximately 50 percent of the trips are destined north on I-5 and 50 percent are destined south on I-5. The results of the impact analysis and the access analysis are discussed later in this Limited Scope TIA. Figure 3 illustrates the project trip distribution and assignment.

EXISTING CONDITIONS

Existing Site Uses

The existing FRB Landfill site receives approximately 850 tons per day of PGM. The existing FRB Landfill is open from 7:00 a.m. to 5:00 p.m., Monday through Saturday.

Existing Roadways

Key roadways in the vicinity of the project are as follows:

- Bee Canyon Access Road:** Bee Canyon Access Road is an undivided three-lane, north-south Local Street west of the project site (three northbound lanes and one southbound lane). Bee Canyon Access Road provides direct access to the project site. The posted speed limit is 55 miles per hour (mph). On-street parking is not permitted on either side of this roadway.
- Sand Canyon Avenue:** According to the City’s General Plan Circulation Element, Sand Canyon Avenue is classified as a Primary Highway north of Irvine Boulevard and a Major Highway south of Irvine Boulevard. Located southwest of the project site, Sand Canyon Avenue is a divided four-lane, north-south roadway north of Irvine Boulevard, and a divided six-lane roadway south of Irvine Boulevard. The posted speed limits north and south of Irvine Boulevard are 50 mph and 55 mph, respectively. On-street (Class II) bicycle lanes and sidewalks are provided on both sides of the street. On-street parking is not permitted.

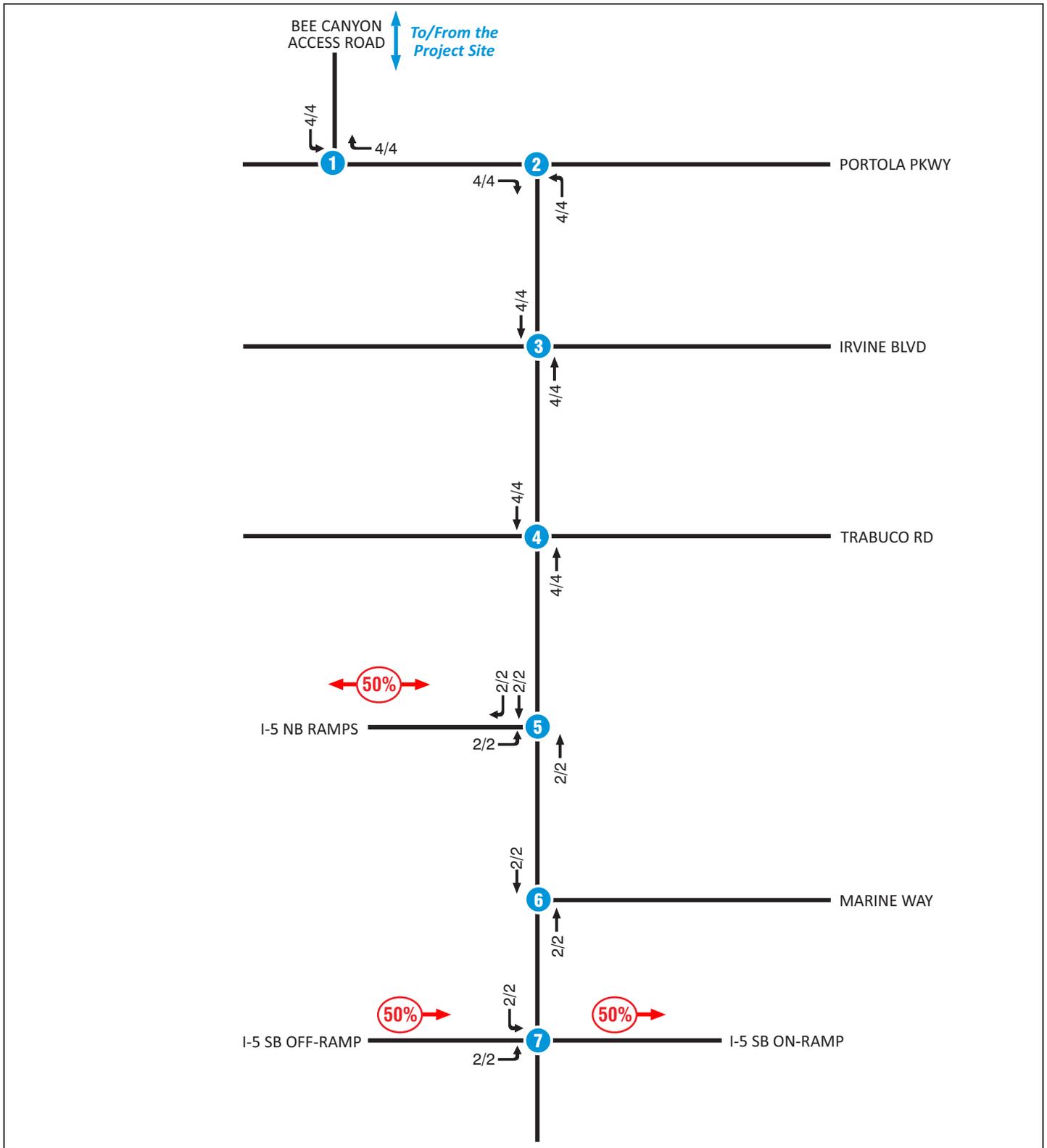


FIGURE 3

LSA



LEGEND

XX/YY - AM/PM Peak Hour Volumes

(XX%) - Project Trip Distribution Percentage

SCHEMATIC - NOT TO SCALE

Bee Canyon Greenery
Project Trip Distribution and Assignment

- **Portola Parkway:** According to the City's General Plan Circulation Element, Portola Parkway is classified as a Primary Highway. Portola Parkway is a divided four-lane, east-west roadway located south and southwest of the project site. The posted speed limit is 50 mph. On-street (Class II) bicycle lanes and sidewalks are provided on both sides of the street in the vicinity of the project site. On-street parking is not permitted.
- **Irvine Boulevard:** According to the City's General Plan Circulation Element, Irvine Boulevard is classified as a Major Highway. Irvine Boulevard is a divided six-lane, east-west roadway located south and southwest of the project site. The posted speed limit is 55 mph. On-street (Class II) bicycle lanes and sidewalks are provided on both sides of the street in the vicinity of the project site. On-street parking is not permitted.
- **Trabuco Road–Great Park Boulevard:** According to the City's General Plan Circulation Element, Trabuco Road (west of Sand Canyon Avenue) is classified as a Primary Highway, and Great Park Boulevard (east of Sand Canyon Avenue) is classified as a Major Highway. The posted speed limit on both roadways is 50 mph. On-street (Class II) bicycle lanes and sidewalks are provided on both sides of the street in the vicinity of the project site. On-street parking is not permitted.

FUTURE CONDITIONS

The following discussion presents the results of the future analysis with and without the project.

Short-Term Interim Year Approved Baseline and Plus Project Traffic Volumes and LOS

Table B summarizes the intersection LOS for the approved baseline and plus project conditions. As Table B indicates, all study area intersections are forecast to operate at satisfactory LOS in the baseline (no project) condition. With the addition of the project in the approved baseline condition, all study area intersections would continue to operate at satisfactory LOS. Therefore, the project can be implemented in a Short-Term Interim Year Approved Baseline condition with no significant peak-hour impacts at the study intersections.

Short-Term Interim Year Pending Baseline and Plus Project Traffic Volumes and LOS

Table C presents a summary of the intersection LOS for the pending baseline and plus project conditions. As Table C indicates, all study area intersections are forecast to operate at satisfactory LOS in the baseline (no project) condition. With the addition of the project in the pending baseline condition, all study area intersections would continue to operate at satisfactory LOS. Therefore, the project can be implemented in a Short-Term Interim Year Pending Baseline condition with no significant peak-hour impacts at the study intersections.

SPECIAL ISSUES

Site Access Analysis

Access to the project site is provided via Bee Canyon Access Road. The TDP evaluation is based on the Short-Term Interim Year Pending Baseline Plus Project conditions.

Table B: Short-Term Interim Year Approved Intersection Level of Service Summary

Study Area No.	ITAM Node No.	Intersection	Baseline				Plus Project				Peak-Hour Δ		Significant Impact?
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		ICU or Delay		
			ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	AM	PM	
1	500	Bee Canyon Access Road/Portola Parkway	0.43	A	0.47	A	0.43	A	0.47	A	0.00	0.00	No
2	300	Sand Canyon Avenue/Portola Parkway	0.35	A	0.57	A	0.35	A	0.57	A	0.00	0.00	No
3	301	Sand Canyon Avenue/Irvine Boulevard	0.68	B	0.71	C	0.68	B	0.71	C	0.00	0.00	No
4	302	Sand Canyon Avenue/Trabuco Road	0.64	B	0.63	B	0.64	B	0.63	B	0.00	0.00	No
5	303	Sand Canyon Avenue/I-5 northbound ramps	0.68	B	0.70	B	0.68	B	0.70	B	0.00	0.00	No
6	304	Sand Canyon Avenue/Marine Way	0.73	C	0.74	C	0.73	C	0.74	C	0.00	0.00	No
7	305	Sand Canyon Avenue/I-5 southbound ramps	0.65	B	0.73	C	0.65	B	0.74	C	0.00	0.00	No

Δ = change

ICU = Intersection Capacity Utilization

LOS = level of service

Table C: Short-Term Interim Year Pending Intersection Level of Service Summary

Study Area No.	ITAM Node No.	Intersection	Baseline				Plus Project				Peak-Hour Δ		Significant Impact?
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		ICU or Delay		
			ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	AM	PM	
1	500	Bee Canyon Access Road/Portola Parkway	0.45	A	0.48	A	0.45	A	0.48	A	0.00	0.00	No
2	300	Sand Canyon Avenue/Portola Parkway	0.36	A	0.57	A	0.36	A	0.57	A	0.00	0.00	No
3	301	Sand Canyon Avenue/Irvine Boulevard	0.69	B	0.72	C	0.69	B	0.73	C	0.00	0.00	No
4	302	Sand Canyon Avenue/Trabuco Road	0.71	C	0.65	B	0.71	C	0.65	B	0.00	0.00	No
5	303	Sand Canyon Avenue/I-5 northbound ramps	0.71	C	0.73	C	0.71	C	0.73	C	0.00	0.00	No
6	304	Sand Canyon Avenue/Marine Way	0.88	D	0.88	D	0.88	D	0.88	D	0.00	0.00	No
7	305	Sand Canyon Avenue/I-5 southbound ramps	0.72	C	0.82	D	0.72	C	0.82	D	0.00	0.00	No

Δ = change

ICU = Intersection Capacity Utilization

LOS = level of service

As previously discussed, project trips were generated using operational information from OC Waste & Recycling (8 a.m. peak-hour trips and 8 p.m. peak-hour trips as shown in Table A). Project trip distribution was developed from information from OC Waste & Recycling (50 percent north on I-5 and 50 percent south on I-5). Figures 4 and 5 illustrate the Short-Term Interim Year Pending Baseline and Plus Project peak-hour volumes at the study area intersections and the project driveway, respectively.

This analysis has been conducted consistent with the approved scope of work and the TDPs. Applicable design criteria for this project include TDP-1 (Turn-Lane Pocket Lengths) and TDP-14 (Driveway Lengths).

TDP-1: Turn-Lane Pocket Lengths

The length of left-turn pockets at signalized intersections is based on several parameters, including traffic control, turn volume, and cycle length. The purpose of the turn-pocket length is to allow the turning vehicle to exit the through movement and decelerate into the turn pocket without impacting the through movement. The minimum single turn-pocket length for Major, Primary, and Secondary Highways (i.e., Sand Canyon Avenue) is 150 feet (ft), and the minimum single turn-pocket length for Commuter, Collector, and Local Streets (i.e., Bee Canyon Access Road) is 90 ft.

Bee Canyon Access Road/Portola Parkway (Southbound). The southbound left-turn lane at the signalized intersection of Bee Canyon Access Road/Portola Parkway is approximately 105 ft. The Short-Term Interim Year Pending Baseline southbound left-turn volume is 77 vehicles during the a.m. peak hour and 4 vehicles during the p.m. peak hour. Based on TDP-1 criteria, the southbound left-turn lane meets the 100 ft required to accommodate the 77 a.m. peak-hour vehicles. The Short-Term Interim Year Pending Baseline Plus Project left-turn volume at this location is 81 a.m. and 8 p.m. peak-hour vehicles (reflecting the addition of 4 project vehicles in both peak hours), as shown on Figure 5. According to TDP-1, 100 ft of southbound left-turn storage capacity is required for the 81 a.m. peak-hour vehicles. As in the baseline condition, the southbound left-turn pocket meets TDP-1 criteria.

Sand Canyon Avenue/Portola Parkway (Northbound). The intersection of Sand Canyon Avenue/Portola Parkway is a T-intersection. The northbound approach has dual left-turn lanes and dual right-turn lanes. The inner left-turn lane and the outer left-turn lane are approximately 280 ft and 510 ft long, respectively. From the back of the outer left-turn lane, there is approximately 800 ft of additional storage to the downstream intersection of Sand Canyon Avenue/Saints Way. Therefore, the total northbound left-turn storage is approximately 1,590 ft.

The Short-Term Interim Year Pending Baseline northbound left-turn volume is 134 vehicles during the a.m. peak hour and 1,002 vehicles during the p.m. peak hour. Based on TDP-1 criteria, the total northbound left-turn storage length meets the 1,300 ft requirement to accommodate the 1,002 p.m. peak-hour vehicles. As shown on Figure 5, the Short-Term Interim Year Pending Plus Project left-turn volumes at this location are 138 a.m. and 1,006 p.m. peak-hour vehicles (reflecting the addition of 4 project vehicles in both peak hours). According to TDP-1, 1,300 ft of northbound left-turn storage capacity are required for the 1,006 p.m. peak-hour vehicles. As in the baseline condition, the total northbound left-turn storage length meets TDP-1 criteria.

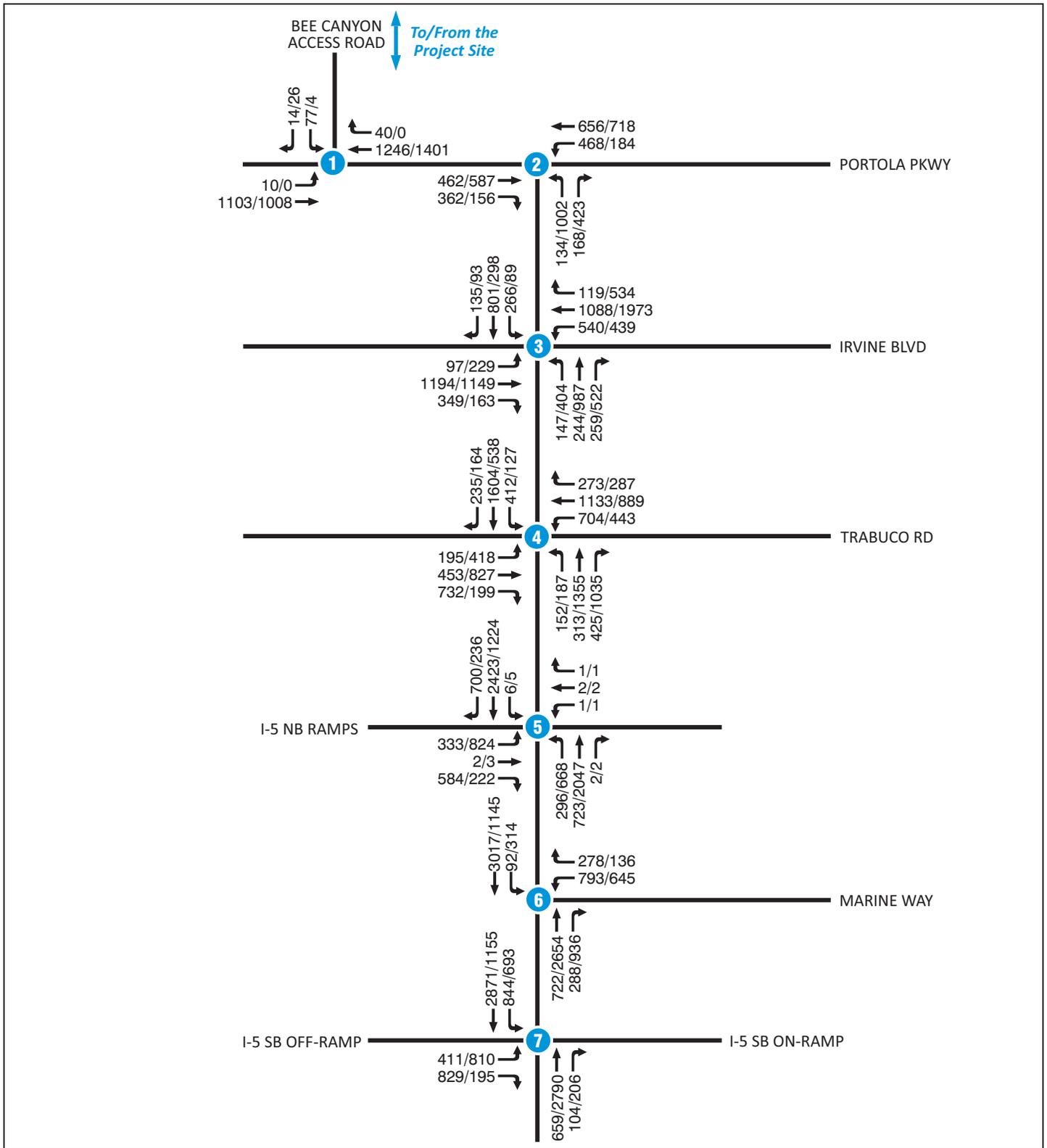


FIGURE 4

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LEGEND

XX/YY - AM/PM Peak Hour Volumes



SCHEMATIC - NOT TO SCALE

Bee Canyon Greenery
Short-Term Interim Year Pending
Baseline Peak Hour Volumes

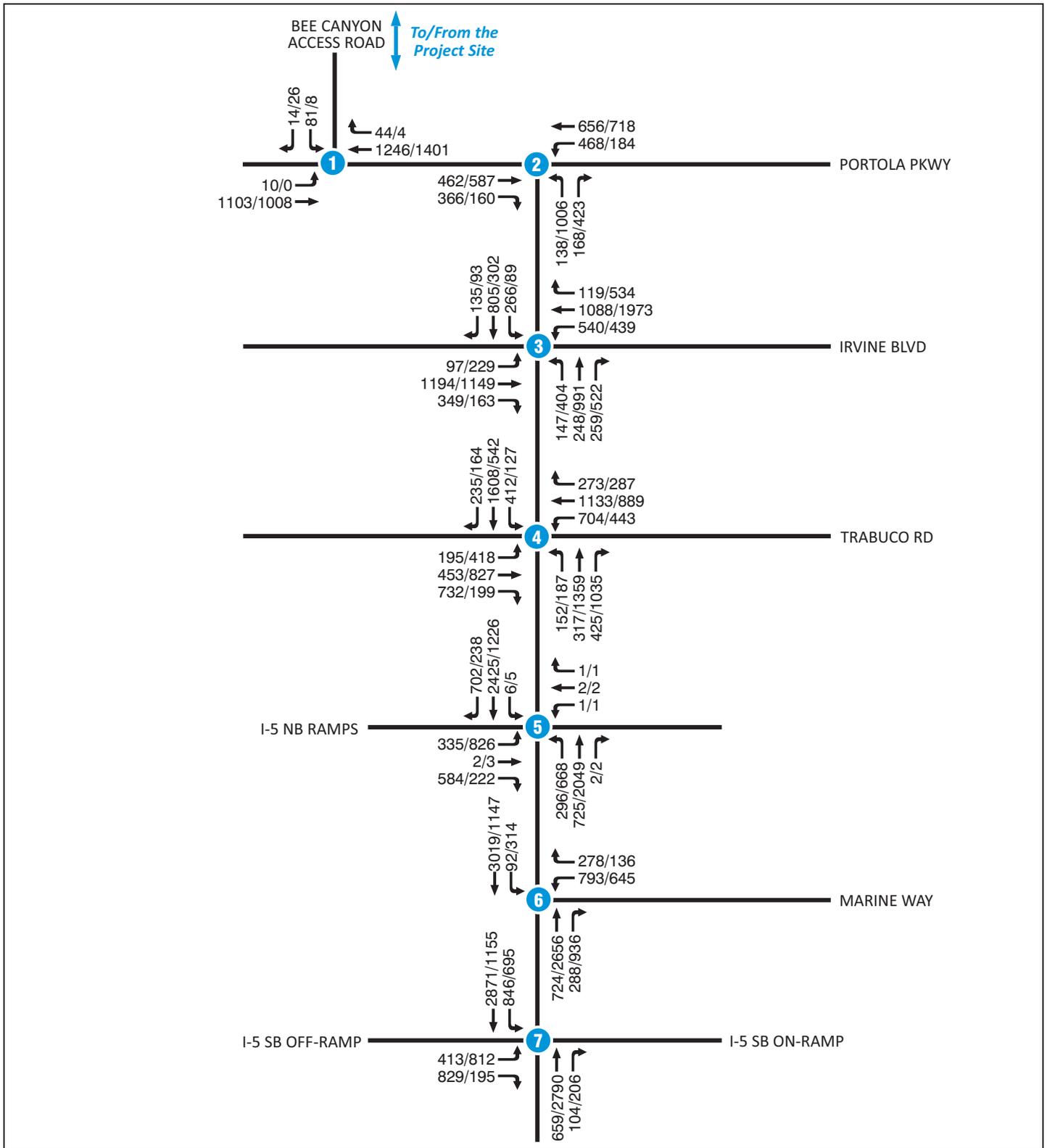


FIGURE 5

LSA

LEGEND

XX/YY - AM/PM Peak Hour Volumes



SCHEMATIC - NOT TO SCALE

Bee Canyon Greenery
 Short-Term Interim Year Pending
 Plus Project Peak Hour Volumes

TDP-14: Driveway Lengths

TDP-14 provides guidance regarding a sufficient driveway length to allow vehicles “to enter the parking area without causing subsequent vehicles to back out on the City street system.” The measurement of sufficient length is based on the distance from the back of the sidewalk or stop bar to the first intersecting parking space or traffic control measure on site. The minimum signalized driveway length should be 75 ft and should increase at a rate of 1 ft of storage per peak-hour vehicle (in 25 ft increments).

The project driveway (Bee Canyon Access Road) provides approximately 9,900 ft (1.9 miles) of throat length (measured from the back of Portola Parkway to the entrance of the FRB Landfill). The Short-Term Interim Year Pending Baseline inbound volume at Bee Canyon Access Road is 50 vehicles in the a.m. peak hour (there are no inbound vehicles in the p.m. peak hour). The inbound project volumes at Bee Canyon Access Road are 4 vehicles in both peak hours. Based on TDP-14 criteria, a driveway throat length of 125 ft is required for the 54 Short-Term Interim Year Pending Plus Project a.m. peak-hour vehicles. As such, the project driveway meets TDP-14 criteria.

REQUIRED IMPROVEMENTS AND/OR RECOMMENDATIONS

Based on the results of this analysis, the Bee Canyon Greenery project can be implemented without significantly impacting the surrounding circulation system in the Short-Term Interim Year Approved and Pending Baseline conditions. The addition of project traffic to study area intersections does not result in City thresholds for performance being exceeded and is not considered significant; therefore, mitigation is not required according to the City performance criteria.

The surrounding intersections and project driveway have been analyzed using the City’s TDPs, which meet the criteria for TDP-1 and TDP-14.

CONCLUSIONS

The Bee Canyon Greenery project can be implemented without impacting the surrounding circulation system. The evaluation of the study area intersection LOS with the expansion of the project on site shows that the addition of project traffic to the Short-Term Interim Year Approved and Pending Baseline conditions would not create any significant adverse impacts according to the City’s performance criteria.

A site access analysis, consistent with the City’s TDPs, was conducted for the project. Based on this analysis, the requirements of TDP-1 and TDP-14 have been met. As such, improvements are neither required nor recommended.

REFERENCES

City of Irvine. 2004. *Traffic Impact Analysis Guidelines*.

_____. 2015. General Plan Circulation Element.

APPENDIX A

APPROVED SCOPE OF WORK

SCOPE OF WORK BEE CANYON GREENERY LIMITED SCOPE TRAFFIC IMPACT ANALYSIS

The purpose of this analysis is to determine short-term traffic impacts resulting from the proposed Bee Canyon Greenery composting operation at the Frank R. Bowerman (FRB) Landfill at 11002 Bee Canyon Access Road in Planning Area 3 (Limestone Canyon – Open Space) of Irvine, California.

The existing FRB Landfill site (located in Traffic Analysis Zone [TAZ] 20) receives approximately 850 tons per day of processed green material (PGM). The proposed Bee Canyon Greenery operation would compost approximately 595 tons of PGM per day on site. Because the PGM is already coming into the FRB Landfill, there would be no additional traffic generated for the intake of PGM. However, after the composting process is complete, 595 tons of compost would be delivered to markets located inside and outside of Orange County. The daily compost delivery would require approximately 30 dump trucks, generating 60 average daily trips (ADT). The designated truck route to/from the FRB Landfill and regional locations is Interstate 5 (I-5), Sand Canyon Avenue, Portola Parkway, and Bee Canyon Access Road.

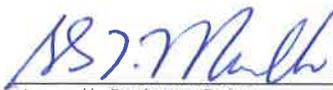
The existing FRB Landfill is open from 7:00 a.m. to 5:00 p.m., Monday through Saturday. The proposed Bee Canyon Greenery would have the same hours of operation. In order to present a conservative, worst-case estimate for trip generation of the project, it is assumed that approximately 25 percent of the truck trips would occur during the peak-hour periods. This is equivalent to approximately 16 ADT, with 8 trips in the a.m. peak hour (4 inbound and 4 outbound) and 8 trips in the p.m. peak hour (4 inbound and 4 outbound). The remaining 44 ADT (22 inbound and 22 outbound) would occur outside of the peak-hour periods.

Based on the City of Irvine's (City) Traffic Impact Analysis (TIA) Guidelines, a TIA is required to evaluate the cumulative impacts with build out of the proposed project. Because the proposed project is anticipated to generate fewer than 50 peak-hour trips, a Limited Scope TIA is required to evaluate short-term interim-year conditions and satisfy the City's analysis requirements. This approach to a Limited Scope TIA was discussed with City Transportation staff on January 15, 2019.

This Limited Scope TIA will be developed in accordance with the applicable sections of the City's TIA Guidelines (adopted by the City Council on August 24, 2004) and the City's Transportation Design Procedures (TDPs) (adopted in February 2007) and will include the following key elements.

I. EXECUTIVE SUMMARY

This section will provide a short, clear, and concise description of the project and Limited Scope TIA findings. The proposed study recommendations and project mitigation measures will also be included in this section, if necessary.


Approved by Development Review

5/7/19

II. INTRODUCTION

This section of the report will include a comprehensive description of the project and key elements of the Limited Scope TIA, including planning area description, general terrain features, and existing/proposed uses on site. The surrounding land uses will also be described. The following elements are identified for the purpose of conducting the Limited Scope TIA.

A. Project Site

A project location (and study area intersection) map is provided in this Limited Scope TIA Scope of Work (see Figure 1, attached) and will be provided in the Limited Scope TIA. The project site is bounded by open space. Access to the project site is provided via Bee Canyon Access Road.

B. Study Area Boundary

As discussed with City Transportation staff and shown on Figure 1, the study area will include the following signalized intersections:

1. Bee Canyon Access Road/Portola Parkway
2. Sand Canyon Avenue/Portola Parkway
3. Sand Canyon Avenue/Irvine Boulevard
4. Sand Canyon Avenue/Trabuco Road–Great Park Boulevard
5. Sand Canyon Avenue/I-5 northbound ramps
6. Sand Canyon Avenue/Marine Way
7. Sand Canyon Avenue/I-5 southbound ramps

III. PERFORMANCE CRITERIA

The performance criteria to determine potential project impacts and mitigation will be consistent with the City's criteria, as approved by the City Council on August 24, 2004. The City's TDPs will be used as the performance criteria to evaluate the design features of the project access.

IV. EXISTING CONDITIONS

A. Existing Site Uses

Existing land uses on site will be identified. The existing site is the FRB Landfill.

B. Existing Roadways and Intersections

The characteristics of the site's surrounding roadway network will be surveyed to verify the existing number of lanes, traffic signal locations, intersection configurations, and other visible factors that may have to be included in the analysis.

V. ANALYSIS METHODOLOGY/APPROACH

Study area intersections will be analyzed using the adopted Intersection Capacity Utilization (ICU) methodology.

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To disclose the effect of adding the project land use in a short-term interim year setting, the following analyses will be conducted:

- Short-Term Interim Year Approved Baseline
- Short-Term Interim Year Approved Baseline Plus Project
- Short-Term Interim Year Pending Baseline
- Short-Term Interim Year Pending Baseline Plus Project

The future (Short-Term Interim Year) conditions will be developed based on the latest version of ITAM. LSA will extract the Short-Term Interim Year Baseline (Approved and Pending) peak-hour traffic volumes for the study area intersections and manually assign the project trips to represent “plus project” conditions.

Project impacts will be identified at study area intersections for the Short-Term Interim Year Baseline (Approved and Pending) conditions assuming improvements to the circulation system identified by the City and included in the ITAM.

VI. PROPOSED PROJECT IMPACTS

A. Trip Generation

LSA will generate a.m. peak-hour trips, p.m. peak-hour trips, and ADT for the proposed project using operational information provided by OC Waste & Recycling (OCWR). As previously discussed, the project would generate 60 ADT, with 8 trips in the a.m. peak hour and 8 trips in the p.m. peak hour.

B. Adjustments to Trip Generation

No adjustments to the trip generation shall be made without prior written approval from the City.

C. Trip Distribution and Trip Assignment

The directions of approach to and departure from the site will be based on operational information from OCWR and the City’s designated truck routes (e.g., Sand Canyon Avenue, Portola Parkway, and I-5).

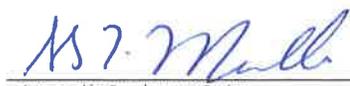
VII. PHASING

The proposed project will be constructed in a single phase and is assumed to be operational by 2020.

VIII. SPECIAL ANALYSES/ISSUES

A. Access Analysis

Access to the proposed project (existing FRB Landfill and new Bee Canyon Greenery) will continue to be provided at Bee Canyon Access Road/Portola Parkway. The designated truck route to/from the site includes I-5, Sand Canyon Avenue, Portola Parkway, and Bee Canyon Access Road.

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An analysis of the City's TDPs will be conducted for the primary access intersections of Bee Canyon Access Road/Portola Parkway and Sand Canyon Avenue/Portola Parkway.

Specific TDPs to be evaluated include:

- TDP-1 (Turn Lane Pocket Lengths) at Bee Canyon Access Road/Portola Parkway (southbound left) and Sand Canyon Avenue/Portola Parkway (northbound left)
- TDP-14 (Driveway Lengths) at Bee Canyon Access Road

A summary of the proposed project and results of the analysis will be prepared. Based upon these results, recommendations will be presented for the interface with adjacent streets (if required). These recommendations will be consistent with the City's TDPs.

IX. REQUIRED MITIGATION MEASURES AND/OR RECOMMENDATIONS

Based on the results and in accordance with the adopted City TIA Guidelines, physical and/or operational improvements and/or alternative mitigation measure improvements required to mitigate any potentially adverse impacts due to the proposed project will be identified. Text will be provided that will summarize the analysis of the traffic impacts from the Limited Scope TIA so that it is apparent that the study fulfills the requirements of the City.

X. CONCLUSIONS

A summary of the results of the analysis and recommendations will be prepared.

XI. REVISIONS TO ANALYSIS

Revisions to the Limited Scope TIA will be provided in response to the City's comments.

XII. SIGNATURE

The Limited Scope TIA will be prepared under the supervision of, and signed, stamped, and dated by, a registered traffic engineer or a registered professional civil engineer with appropriate engineering and/or planning credentials.

Attachment: Figure 1 – Project Location and Study Area Intersections

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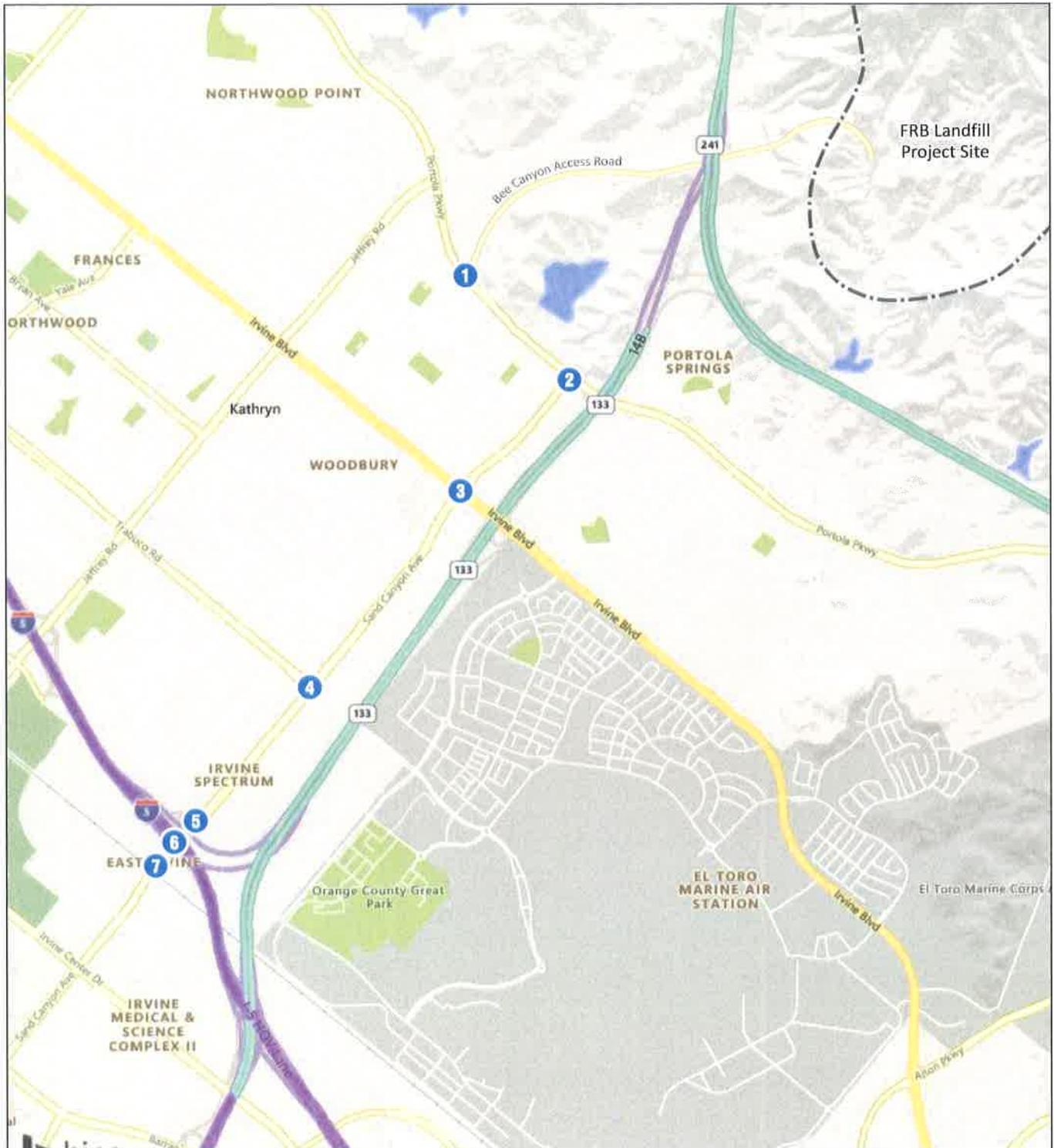


FIGURE 1

LSA

LEGEND

- Study Area Intersection



0 1500 3000
FEET

SOURCE: Bing Maps

I:\OCY1701.09\Loc&Ints.cdr (5/3/2019)

Bee Canyon Greenery
Project Location and
Study Area Intersections

887 Mark
5/7/19

APPENDIX B

ITAM TRAFFIC FORECASTS AND ICU SHEETS

300 . Sand Canyon. Av. at Portola Pkwy.

Interim Approved NP						
	LANES	CAPACITY	AM PK HOUR VOL	V/C	PM PK HOUR VOL	V/C
NBL	2	3400	160	.05*	1014	.30*
NBT	0	0	0		0	
NBR	2	3400	171	.05	415	.12
SBL	0	0	0		0	
SBT	0	0	0		0	
SBR	0	0	0		0	
EBL	0	0	0		0	
EBT	2	3400	459	.14*	568	.17*
EBR	f		395		153	
WBL	2	3400	395	.12*	179	.05*
WBT	2	3400	590	.17	701	.21
WBR	0	0	0		0	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .36 .57

301 . Sand Canyon. Av. at Irvine Bl.

Interim Approved NP						
	LANES	CAPACITY	AM PK HOUR VOL	V/C	PM PK HOUR VOL	V/C
NBL	2	3400	141	.04*	411	.12
NBT	3	5100	261	.05	1003	.20*
NBR	2	3400	258	.08	477	.14
SBL	2	3400	255	.08	79	.02*
SBT	2	3400	781	.23*	298	.09
SBR	1	1700	124	.07	92	.05
EBL	2	3400	100	.03	228	.07*
EBT	4	6800	1161	.17*	1027	.15
EBR	1	1700	346	.20	164	.10
WBL	2	3400	517	.15*	429	.13
WBT	3	5100	986	.19	1901	.37*
WBR	1	1700	120	.07	513	.30
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .64 .71

302 . Sand Canyon. Av. at Trabuco Pkwy.

Interim Approved NP						
	LANES	CAPACITY	AM PK HOUR VOL	V/C	PM PK HOUR VOL	V/C
NBL	2	3400	164	.05*	182	.05
NBT	3	5100	329	.06	1366	.27*
NBR	f		467		908	
SBL	2	3400	466	.14	109	.03*
SBT	3	5100	1473	.29*	545	.11
SBR	1	1700	261	.15	156	.09
EBL	2	3400	220	.06	402	.12*
EBT	3	5100	537	.11*	693	.14
EBR	f		703		197	
WBL	2	3400	504	.15*	447	.13
WBT	3	5100	984	.19	842	.17*
WBR	d	1700	231	.14	281	.17
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .65 .64

303 . Sand Canyon. Av. at I-5 NB Ramps

Interim Approved NP						
	LANES	CAPACITY	AM PK HOUR VOL	V/C	PM PK HOUR VOL	V/C
NBL	2	3400	238	.07*	621	.18*
NBT	3	5100	743	.15	2016	.40
NBR	d	1700	2	.00	2	.00
SBL	1	1700	6	.00	5	.00
SBT	3	5100	2240	.44*	1204	.24*
SBR	1	1700	610	.36	252	.15
EBL	1.5		389		775	
EBT	0.5	3400	3	.12*	3	.23*
EBR	2	3400	569	.17	182	.05
WBL	1	1700	1	.00	1	.00
WBT	1	1700	2	.00*	2	.00*
WBR	0	0	1		1	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .68 .70

Note: Assumes E/W Split Phasing

304 . Sand Canyon. Av. at Marine Wy.

Interim Approved NP						
	LANES	CAPACITY	AM PK HOUR VOL	V/C	PM PK HOUR VOL	V/C
NBL	0	0	0		0	
NBT	3	5100	774	.15	2614	.51*
NBR	1	1700	222	.13	549	.32
SBL	2	3400	78	.02	241	.07*
SBT	3	5100	2827	.55*	1172	.23
SBR	0	0	0		0	
EBL	0	0	0		0	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	2	3400	423	.12*	358	.11*
WBT	0	0	0		0	
WBR	1	1700	186	.11	96	.06
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				.72	.74	

305 . Sand Canyon. Av. at I-5 SB Ramps

Interim Approved NP						
	LANES	CAPACITY	AM PK HOUR VOL	V/C	PM PK HOUR VOL	V/C
NBL	0	0	0		0	
NBT	4	6800	652	.10	2436	.36*
NBR	1	1700	110	.06	215	.13
SBL	2	3400	738	.22	613	.18*
SBT	4	6800	2428	.36*	992	.15
SBR	0	0	0		0	
EBL	2.5		398	.12*	744	.15*
EBT	0	6800	2		1	
EBR	1.5		832	.24	208	
WBL	0	0	0		0	
WBT	0	0	0		0	
WBR	0	0	0		0	
Right Turn Adjustment			EBR	.12*		
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				.65	.74	

500 . Bee Canyon Access Rd. at Portola Pkwy.

Interim Approved NP						
	LANES	CAPACITY	AM PK HOUR VOL	V/C	PM PK HOUR VOL	V/C
NBL	0	0	0		0	
NBT	0	0	0		0	
NBR	0	0	0		0	
SBL	1.5		86		12	.01*
SBT	0	3400	0	.03*	0	
SBR	0.5		14		46	.03
EBL	1	1700	16	.01*	0	.00
EBT	2	3400	1124	.33	958	.28
EBR	0	0	0		0	
WBL	0	0	0		0	
WBT	2	3400	1166	.34*	1334	.39*
WBR	d	1700	64	.04	0	.00
Right Turn Adjustment					SBR	.02*
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				.43	.47	

300 . Sand Canyon. Av. at Portola Pkwy.

Interim Pending NP						
	LANES	CAPACITY	AM PK HOUR VOL	V/C	PM PK HOUR VOL	V/C
NBL	2	3400	134	.04*	1002	.29*
NBT	0	0	0		0	
NBR	2	3400	168	.05	423	.12
SBL	0	0	0		0	
SBT	0	0	0		0	
SBR	0	0	0		0	
EBL	0	0	0		0	
EBT	2	3400	462	.14*	587	.17*
EBR	f		362		156	
WBL	2	3400	468	.14*	184	.05*
WBT	2	3400	656	.19	718	.21
WBR	0	0	0		0	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .37 .56

301 . Sand Canyon. Av. at Irvine Bl.

Interim Pending NP						
	LANES	CAPACITY	AM PK HOUR VOL	V/C	PM PK HOUR VOL	V/C
NBL	2	3400	147	.04*	404	.12
NBT	3	5100	244	.05	987	.19*
NBR	2	3400	259	.08	522	.15
SBL	2	3400	266	.08	89	.03*
SBT	2	3400	801	.24*	298	.09
SBR	1	1700	135	.08	93	.05
EBL	2	3400	97	.03	229	.07*
EBT	4	6800	1194	.18*	1149	.17
EBR	1	1700	349	.21	163	.10
WBL	2	3400	540	.16*	439	.13
WBT	3	5100	1088	.21	1973	.39*
WBR	1	1700	119	.07	534	.31
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .67 .73

302 . Sand Canyon. Av. at Trabuco Pkwy.

Interim Pending NP						
	LANES	CAPACITY	AM PK HOUR VOL	V/C	PM PK HOUR VOL	V/C
NBL	2	3400	152	.04*	187	.06
NBT	3	5100	313	.06	1355	.27*
NBR	f		425		1035	
SBL	2	3400	412	.12	127	.04*
SBT	3	5100	1604	.31*	538	.11
SBR	1	1700	235	.14	164	.10
EBL	2	3400	195	.06	418	.12*
EBT	3	5100	453	.09*	827	.16
EBR	f		732		199	
WBL	2	3400	704	.21*	443	.13
WBT	3	5100	1133	.22	889	.17*
WBR	d	1700	273	.16	287	.17
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .70 .65

303 . Sand Canyon. Av. at I-5 NB Ramps

Interim Pending NP						
	LANES	CAPACITY	AM PK HOUR VOL	V/C	PM PK HOUR VOL	V/C
NBL	2	3400	296	.09*	668	.20*
NBT	3	5100	723	.14	2047	.40
NBR	d	1700	2	.00	2	.00
SBL	1	1700	6	.00	5	.00
SBT	3	5100	2423	.48*	1224	.24*
SBR	1	1700	700	.41	236	.14
EBL	1.5		333		824	
EBT	0.5	3400	2	.10*	3	.24*
EBR	2	3400	584	.17	222	.07
WBL	1	1700	1	.00	1	.00
WBT	1	1700	2	.00*	2	.00*
WBR	0	0	1		1	
Clearance Interval				.05*		.05*

TOTAL CAPACITY UTILIZATION .72 .73

Note: Assumes E/W Split Phasing

304 . Sand Canyon. Av. at Marine Wy.

Interim Pending NP						
	LANES	CAPACITY	AM PK HOUR VOL	V/C	PM PK HOUR VOL	V/C
NBL	0	0	0		0	
NBT	3	5100	722	.14	2654	.52*
NBR	1	1700	288	.17	936	.55
SBL	2	3400	92	.03	314	.09*
SBT	3	5100	3017	.59*	1145	.22
SBR	0	0	0		0	
EBL	0	0	0		0	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	2	3400	793	.23*	645	.19*
WBT	0	0	0		0	
WBR	1	1700	278	.16	136	.08
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				.87		.85

305 . Sand Canyon. Av. at I-5 SB Ramps

Interim Pending NP						
	LANES	CAPACITY	AM PK HOUR VOL	V/C	PM PK HOUR VOL	V/C
NBL	0	0	0		0	
NBT	4	6800	659	.10	2790	.41*
NBR	1	1700	104	.06	206	.12
SBL	2	3400	844	.25	693	.20*
SBT	4	6800	2871	.42*	1155	.17
SBR	0	0	0		0	
EBL	2.5		411	.12*	810	.16*
EBT	0	6800	2		1	
EBR	1.5		829	.24	195	
WBL	0	0	0		0	
WBT	0	0	0		0	
WBR	0	0	0		0	
Right Turn Adjustment			EBR	.12*		
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				.71		.82

500 . Bee Canyon Access Rd. at Portola Pkwy.

Interim Pending NP						
	LANES	CAPACITY	AM PK HOUR VOL	V/C	PM PK HOUR VOL	V/C
NBL	0	0	0		0	
NBT	0	0	0		0	
NBR	0	0	0		0	
SBL	1.5		77		4	
SBT	0	3400	0	.03*	0	
SBR	0.5		14		26	.02
EBL	1	1700	10	.01*	0	.00
EBT	2	3400	1103	.32	1008	.30
EBR	0	0	0		0	
WBL	0	0	0		0	
WBT	2	3400	1246	.37*	1401	.41*
WBR	d	1700	40	.02	0	.00
Right Turn Adjustment					SBR	.02*
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				.46		.48

 Impact Analysis Report
 Level Of Service

Intersection	Base		Future		Change in
	Del/ LOS	V/ Veh C	Del/ LOS	V/ Veh C	
# 1 Bee Canyon Access Rd/Portola P	A	xxxxxx 0.432	A	xxxxxx 0.432	+ 0.000 V/C
# 2 Sand Canyon Ave/Portola Pwy	A	xxxxxx 0.348	A	xxxxxx 0.348	+ 0.000 V/C
# 3 Sand Canyon Ave/Irvine Blvd	B	xxxxxx 0.677	B	xxxxxx 0.677	+ 0.000 V/C
# 4 Sand Canyon Ave/Trabuco Rd-Gre	B	xxxxxx 0.641	B	xxxxxx 0.641	+ 0.000 V/C
# 5 Sand Canyon Ave/I-5 Northbound	B	xxxxxx 0.676	B	xxxxxx 0.676	+ 0.000 V/C
# 6 Sand Canyon Ave/Marine Way	C	xxxxxx 0.729	C	xxxxxx 0.729	+ 0.000 V/C
# 7 Sand Canyon Ave/I-5 Southbound	B	xxxxxx 0.652	B	xxxxxx 0.652	+ 0.000 V/C

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Bee Canyon Access Rd/Portola Pwy

Cycle (sec): 100 Critical Vol./Cap.(X): 0.432

Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx

Optimal Cycle: 21 Level Of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected
Rights: Include Include Include Include

Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0

Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0

Lanes: 0 0 0 0 0 1 0 1 0 0 1 0 2 0 0 0 0 2 0 1

Volume Module:

Base Vol: 0 0 0 86 0 14 16 1124 0 0 1166 64

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 0 0 0 86 0 14 16 1124 0 0 1166 64

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Volume: 0 0 0 86 0 14 16 1124 0 0 1166 64

Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 0 0 0 86 0 14 16 1124 0 0 1166 64

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

FinalVolume: 0 0 0 86 0 14 16 1124 0 0 1166 64

Saturation Flow Module:

Sat/Lane: 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 0.00 0.00 0.00 1.72 0.00 0.28 1.00 2.00 0.00 0.00 2.00 1.00

Final Sat.: 0 0 0 2924 0 476 1700 3400 0 0 3400 1700

Capacity Analysis Module:

Vol/Sat: 0.00 0.00 0.00 0.03 0.00 0.03 0.01 0.33 0.00 0.00 0.34 0.04

Crit Moves: **** **** ****

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Sand Canyon Ave/Portola Pwy

Cycle (sec): 100 Critical Vol./Cap.(X): 0.348
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 19 Level Of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected
Rights: Ovl Include Ignore Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 2 0 0 0 2 0 0 0 0 0 0 0 2 0 2 0 0

Volume Module:
Base Vol: 160 0 171 0 0 0 0 0 459 395 395 590 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 160 0 171 0 0 0 0 0 459 395 395 590 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00
PHF Volume: 160 0 171 0 0 0 0 0 459 0 395 590 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 160 0 171 0 0 0 0 0 459 0 395 590 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00
FinalVolume: 160 0 171 0 0 0 0 0 459 0 395 590 0
OvlAdjVol: 0

Saturation Flow Module:
Sat/Lane: 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 2.00 0.00 2.00 0.00 0.00 0.00 0.00 2.00 1.00 2.00 2.00 0.00
Final Sat.: 3400 0 3400 0 0 0 0 3400 1700 3400 3400 0

Capacity Analysis Module:
Vol/Sat: 0.05 0.00 0.05 0.00 0.00 0.00 0.00 0.14 0.00 0.12 0.17 0.00
OvlAdjV/S: 0.00
Crit Moves: **** **** ****

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Sand Canyon Ave/Irvine Blvd

Cycle (sec): 100 Critical Vol./Cap. (X): 0.677
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 35 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected
Rights: Ovl Include Include Ignore
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 2 0 3 0 2 2 0 2 0 1 2 0 4 0 1 2 0 3 0 1

Volume Module:
Base Vol: 141 261 258 255 781 124 100 161 346 517 986 120
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 141 261 258 255 781 124 100 161 346 517 986 120
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00
PHF Volume: 141 261 258 255 781 124 100 161 346 517 986 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 141 261 258 255 781 124 100 161 346 517 986 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00
FinalVolume: 141 261 258 255 781 124 100 161 346 517 986 0
OvlAdjVol: 0

Saturation Flow Module:
Sat/Lane: 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 2.00 3.00 2.00 2.00 2.00 1.00 2.00 4.00 1.00 2.00 3.00 1.00
Final Sat.: 3400 5100 3400 3400 3400 1700 3400 6800 1700 3400 5100 1700

Capacity Analysis Module:
Vol/Sat: 0.04 0.05 0.08 0.08 0.23 0.07 0.03 0.02 0.20 0.15 0.19 0.00
OvlAdjV/S: 0.00
Crit Moves: **** **** **** ****

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Sand Canyon Ave/Trabuco Rd-Great Park Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.641
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 32 Level Of Service: B

Table with columns for Approach (North, South, East, West Bound) and Movement (L, T, R). Rows include Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat and Crit Moves.

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 Sand Canyon Ave/I-5 Northbound Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.676
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 35 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected
Rights: Include Include Ovl Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 2 0 3 0 1 1 0 3 0 1 1 1 0 0 2 1 0 0 1 0

Volume Module:
Base Vol: 238 743 2 6 2240 610 389 3 569 1 2 1
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 238 743 2 6 2240 610 389 3 569 1 2 1
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 238 743 2 6 2240 610 389 3 569 1 2 1
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 238 743 2 6 2240 610 389 3 569 1 2 1
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 238 743 2 6 2240 610 389 3 569 1 2 1
OvlAdjVol: 331

Saturation Flow Module:
Sat/Lane: 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 2.00 3.00 1.00 1.00 3.00 1.00 1.98 0.02 2.00 1.00 0.67 0.33
Final Sat.: 3400 5100 1700 1700 5100 1700 3374 26 3400 1700 1133 567

Capacity Analysis Module:
Vol/Sat: 0.07 0.15 0.00 0.00 0.44 0.36 0.12 0.12 0.17 0.00 0.00 0.00
OvlAdjV/S: 0.10
Crit Moves: **** **** **** ****

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Sand Canyon Ave/Marine Way

Cycle (sec): 100 Critical Vol./Cap.(X): 0.729
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 40 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 0 0 3 0 1 2 0 3 0 0 0 0 0 0 0 2 0 0 0 1

Volume Module:
Base Vol: 0 774 222 78 2827 0 0 0 0 423 0 186
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 774 222 78 2827 0 0 0 0 423 0 186
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 774 222 78 2827 0 0 0 0 423 0 186
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 774 222 78 2827 0 0 0 0 423 0 186
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 774 222 78 2827 0 0 0 0 423 0 186

Saturation Flow Module:
Sat/Lane: 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 3.00 1.00 2.00 3.00 0.00 0.00 0.00 0.00 2.00 0.00 1.00
Final Sat.: 0 5100 1700 3400 5100 0 0 0 0 3400 0 1700

Capacity Analysis Module:
Vol/Sat: 0.00 0.15 0.13 0.02 0.55 0.00 0.00 0.00 0.00 0.12 0.00 0.11
Crit Moves: ****

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Sand Canyon Ave/I-5 Southbound Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.652
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 33 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 0 0 4 0 1 2 0 4 0 0 2 0 1! 0 1 0 0 0 0 0

Volume Module:
Base Vol: 0 652 110 738 2428 0 398 0 832 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 652 110 738 2428 0 398 0 832 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 652 110 738 2428 0 398 0 832 0 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 652 110 738 2428 0 398 0 832 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 652 110 738 2428 0 398 0 832 0 0 0

Saturation Flow Module:
Sat/Lane: 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 4.00 1.00 2.00 4.00 0.00 2.00 0.00 2.00 0.00 0.00 0.00
Final Sat.: 0 6800 1700 3400 6800 0 3400 0 3400 0 0 0

Capacity Analysis Module:
Vol/Sat: 0.00 0.10 0.06 0.22 0.36 0.00 0.12 0.00 0.24 0.00 0.00 0.00
Crit Moves: **** **** ****

Impact Analysis Report
Level Of Service

Intersection	Base		Future		Change in
	Del/ LOS	V/ Veh C	Del/ LOS	V/ Veh C	
# 1 Bee Canyon Access Rd/Portola P	A	xxxxxx 0.469	A	xxxxxx 0.469	+ 0.000 V/C
# 2 Sand Canyon Ave/Portola Pwy	A	xxxxxx 0.568	A	xxxxxx 0.568	+ 0.000 V/C
# 3 Sand Canyon Ave/Irvine Blvd	C	xxxxxx 0.710	C	xxxxxx 0.710	+ 0.000 V/C
# 4 Sand Canyon Ave/Trabuco Rd-Gre	B	xxxxxx 0.633	B	xxxxxx 0.633	+ 0.000 V/C
# 5 Sand Canyon Ave/I-5 Northbound	B	xxxxxx 0.699	B	xxxxxx 0.699	+ 0.000 V/C
# 6 Sand Canyon Ave/Marine Way	C	xxxxxx 0.739	C	xxxxxx 0.739	+ 0.000 V/C
# 7 Sand Canyon Ave/I-5 Southbound	C	xxxxxx 0.734	C	xxxxxx 0.734	+ 0.000 V/C

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Bee Canyon Access Rd/Portola Pwy

Cycle (sec): 100 Critical Vol./Cap.(X): 0.469
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 22 Level Of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 0 0 0 0 0 1 0 1 0 0 1 0 2 0 0 0 0 2 0 1

Volume Module:
Base Vol: 0 0 0 12 0 46 0 958 0 0 1334 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 0 12 0 46 0 958 0 0 1334 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 0 12 0 46 0 958 0 0 1334 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 0 0 12 0 46 0 958 0 0 1334 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 0 0 12 0 46 0 958 0 0 1334 0

Saturation Flow Module:
Sat/Lane: 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 0.00 0.00 1.00 0.00 1.00 1.00 2.00 0.00 0.00 2.00 1.00
Final Sat.: 0 0 0 1700 0 1700 1700 3400 0 0 3400 1700

Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.01 0.00 0.03 0.00 0.28 0.00 0.00 0.39 0.00
Crit Moves: **** **

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Sand Canyon Ave/Portola Pwy

Cycle (sec): 100 Critical Vol./Cap.(X): 0.568
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 27 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different traffic movements and 10 rows of volume-related metrics.

Saturation Flow Module: Table with 12 columns representing different traffic movements and 4 rows of saturation flow metrics.

Capacity Analysis Module: Table with 12 columns representing different traffic movements and 3 rows of capacity analysis metrics.

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Sand Canyon Ave/Irvine Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.710
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 38 Level Of Service: C

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Approach, Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different traffic movements and 10 rows of adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for movements and 4 rows for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 12 columns for movements and 3 rows for Vol/Sat, OvlAdjV/S, and Crit Moves.

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Sand Canyon Ave/Trabuco Rd-Great Park Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.633
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 31 Level Of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different volume categories and 12 rows of data.

Saturation Flow Module: Table with 12 columns representing saturation flow values and 4 rows of data.

Capacity Analysis Module: Table with 12 columns representing capacity analysis metrics and 3 rows of data.

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 Sand Canyon Ave/I-5 Northbound Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.699
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 37 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected
Rights: Include Include Ovl Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 2 0 3 0 1 1 0 3 0 1 1 1 0 0 2 1 0 0 1 0

Volume Module:
Base Vol: 621 2016 2 5 1204 252 775 3 182 1 2 1
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 621 2016 2 5 1204 252 775 3 182 1 2 1
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 621 2016 2 5 1204 252 775 3 182 1 2 1
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 621 2016 2 5 1204 252 775 3 182 1 2 1
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 621 2016 2 5 1204 252 775 3 182 1 2 1
OvlAdjVol: 0

Saturation Flow Module:
Sat/Lane: 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 2.00 3.00 1.00 1.00 3.00 1.00 1.99 0.01 2.00 1.00 0.67 0.33
Final Sat.: 3400 5100 1700 1700 5100 1700 3387 13 3400 1700 1133 567

Capacity Analysis Module:
Vol/Sat: 0.18 0.40 0.00 0.00 0.24 0.15 0.23 0.23 0.05 0.00 0.00 0.00
OvlAdjV/S: 0.00
Crit Moves: ****

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Sand Canyon Ave/Marine Way

Cycle (sec): 100 Critical Vol./Cap.(X): 0.739
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 42 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 0 0 3 0 1 2 0 3 0 0 0 0 0 0 0 2 0 0 0 1

Volume Module:
Base Vol: 0 2614 549 241 1172 0 0 0 0 358 0 96
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 2614 549 241 1172 0 0 0 0 358 0 96
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 2614 549 241 1172 0 0 0 0 358 0 96
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 2614 549 241 1172 0 0 0 0 358 0 96
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 2614 549 241 1172 0 0 0 0 358 0 96

Saturation Flow Module:
Sat/Lane: 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 3.00 1.00 2.00 3.00 0.00 0.00 0.00 0.00 2.00 0.00 1.00
Final Sat.: 0 5100 1700 3400 5100 0 0 0 0 3400 0 1700

Capacity Analysis Module:
Vol/Sat: 0.00 0.51 0.32 0.07 0.23 0.00 0.00 0.00 0.00 0.11 0.00 0.06
Crit Moves: **** **** ****

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Sand Canyon Ave/I-5 Southbound Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.734
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 41 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 0 0 4 0 1 2 0 4 0 0 2 0 1! 0 1 0 0 0 0 0

Volume Module:
Base Vol: 0 2436 215 613 992 0 744 0 208 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 2436 215 613 992 0 744 0 208 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 2436 215 613 992 0 744 0 208 0 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 2436 215 613 992 0 744 0 208 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 2436 215 613 992 0 744 0 208 0 0 0

Saturation Flow Module:
Sat/Lane: 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 4.00 1.00 2.00 4.00 0.00 3.00 0.00 1.00 0.00 0.00 0.00
Final Sat.: 0 6800 1700 3400 6800 0 5100 0 1700 0 0 0

Capacity Analysis Module:
Vol/Sat: 0.00 0.36 0.13 0.18 0.15 0.00 0.15 0.00 0.12 0.00 0.00 0.00
Crit Moves: **** **** ****

 Impact Analysis Report
 Level Of Service

Intersection	Base		Future		Change in
	Del/ LOS	V/ Veh C	Del/ LOS	V/ Veh C	
# 1 Bee Canyon Access Rd/Portola P	A	xxxxxx 0.433	A	xxxxxx 0.433	+ 0.000 V/C
# 2 Sand Canyon Ave/Portola Pwy	A	xxxxxx 0.349	A	xxxxxx 0.349	+ 0.000 V/C
# 3 Sand Canyon Ave/Irvine Blvd	B	xxxxxx 0.678	B	xxxxxx 0.678	+ 0.000 V/C
# 4 Sand Canyon Ave/Trabuco Rd-Gre	B	xxxxxx 0.641	B	xxxxxx 0.641	+ 0.000 V/C
# 5 Sand Canyon Ave/I-5 Northbound	B	xxxxxx 0.677	B	xxxxxx 0.677	+ 0.000 V/C
# 6 Sand Canyon Ave/Marine Way	C	xxxxxx 0.729	C	xxxxxx 0.729	+ 0.000 V/C
# 7 Sand Canyon Ave/I-5 Southbound	B	xxxxxx 0.652	B	xxxxxx 0.652	+ 0.000 V/C

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Bee Canyon Access Rd/Portola Pwy

Cycle (sec): 100 Critical Vol./Cap.(X): 0.433
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 21 Level Of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 0 0 0 0 0 1 0 1 0 0 1 0 2 0 0 0 0 2 0 1

Volume Module:
Base Vol: 0 0 0 90 0 14 16 1124 0 0 1166 68
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 0 90 0 14 16 1124 0 0 1166 68
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 0 90 0 14 16 1124 0 0 1166 68
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 0 0 90 0 14 16 1124 0 0 1166 68
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 0 0 90 0 14 16 1124 0 0 1166 68

Saturation Flow Module:
Sat/Lane: 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 0.00 0.00 1.73 0.00 0.27 1.00 2.00 0.00 0.00 2.00 1.00
Final Sat.: 0 0 0 2942 0 458 1700 3400 0 0 3400 1700

Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.03 0.00 0.03 0.01 0.33 0.00 0.00 0.34 0.04
Crit Moves: **** * * * *

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
*****
Intersection #2 Sand Canyon Ave/Portola Pwy
*****
Cycle (sec):          100          Critical Vol./Cap.(X):          0.349
Loss Time (sec):      5            Average Delay (sec/veh):        xxxxxx
Optimal Cycle:        19            Level Of Service:                A
*****
Approach:             North Bound      South Bound      East Bound      West Bound
Movement:             L - T - R      L - T - R      L - T - R      L - T - R
-----|-----|-----|-----|
Control:              Protected      Protected      Protected      Protected
Rights:               Ovl           Include        Ignore         Include
Min. Green:           0 0 0         0 0 0         0 0 0         0 0 0 0
Y+R:                  4.0 4.0 4.0   4.0 4.0 4.0   4.0 4.0 4.0   4.0 4.0 4.0
Lanes:                2 0 0 0 2     0 0 0 0 0     0 0 2 0 1     2 0 2 0 0
-----|-----|-----|-----|
Volume Module:
Base Vol:             164 0 171     0 0 0         0 459 399     395 590 0
Growth Adj:           1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:          164 0 171     0 0 0         0 459 399     395 590 0
User Adj:             1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00
PHF Adj:              1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00
PHF Volume:           164 0 171     0 0 0         0 459 0       395 590 0
Reduct Vol:           0 0 0         0 0 0         0 0 0         0 0 0 0
Reduced Vol:          164 0 171     0 0 0         0 459 0       395 590 0
PCE Adj:              1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00
MLF Adj:              1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00
FinalVolume:          164 0 171     0 0 0         0 459 0       395 590 0
OvlAdjVol:            0
-----|-----|-----|-----|
Saturation Flow Module:
Sat/Lane:             1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
Adjustment:           1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes:                2.00 0.00 2.00 0.00 0.00 0.00 0.00 2.00 1.00 2.00 2.00 0.00
Final Sat.:           3400 0 3400 0 0 0 0 3400 1700 3400 3400 0
-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat:              0.05 0.00 0.05 0.00 0.00 0.00 0.00 0.14 0.00 0.12 0.17 0.00
OvlAdjV/S:            0.00
Crit Moves:          ****                      ****          ****
*****

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
*****
Intersection #3 Sand Canyon Ave/Irvine Blvd
*****
Cycle (sec):          100          Critical Vol./Cap.(X):          0.678
Loss Time (sec):      5            Average Delay (sec/veh):        xxxxxx
Optimal Cycle:        35            Level Of Service:                B
*****
Approach:             North Bound      South Bound      East Bound      West Bound
Movement:             L - T - R      L - T - R      L - T - R      L - T - R
-----|-----|-----|-----|
Control:              Protected      Protected      Protected      Protected
Rights:               Ovl           Include        Include        Ignore
Min. Green:           0 0 0         0 0 0         0 0 0         0 0 0
Y+R:                  4.0 4.0 4.0   4.0 4.0 4.0   4.0 4.0 4.0   4.0 4.0 4.0
Lanes:                2 0 3 0 2     2 0 2 0 1     2 0 4 0 1     2 0 3 0 1
-----|-----|-----|-----|
Volume Module:
Base Vol:             141 265 258   255 785 124   100 1161 346   517 986 120
Growth Adj:           1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:          141 265 258   255 785 124   100 1161 346   517 986 120
User Adj:              1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00
PHF Adj:              1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00
PHF Volume:           141 265 258   255 785 124   100 1161 346   517 986 0
Reduct Vol:           0 0 0         0 0 0         0 0 0         0 0 0
Reduced Vol:          141 265 258   255 785 124   100 1161 346   517 986 0
PCE Adj:              1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00
MLF Adj:              1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00
FinalVolume:          141 265 258   255 785 124   100 1161 346   517 986 0
OvlAdjVol:            0
-----|-----|-----|-----|
Saturation Flow Module:
Sat/Lane:             1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
Adjustment:           1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes:                2.00 3.00 2.00 2.00 2.00 1.00 2.00 4.00 1.00 2.00 3.00 1.00
Final Sat.:           3400 5100 3400 3400 3400 1700 3400 6800 1700 3400 5100 1700
-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat:              0.04 0.05 0.08 0.08 0.23 0.07 0.03 0.17 0.20 0.15 0.19 0.00
OvlAdjV/S:            0.00
Crit Moves:          ****                ****                ****  ****
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
*****
Intersection #4 Sand Canyon Ave/Trabuco Rd-Great Park Blvd
*****
Cycle (sec):          100          Critical Vol./Cap.(X):          0.641
Loss Time (sec):      5           Average Delay (sec/veh):          xxxxxx
Optimal Cycle:        32           Level Of Service:          B
*****
Approach:      North Bound      South Bound      East Bound      West Bound
Movement:      L - T - R      L - T - R      L - T - R      L - T - R
-----|-----|-----|-----|
Control:        Protected      Protected      Protected      Protected
Rights:         Ignore         Include        Ignore         Include
Min. Green:     0 0 0 0 0 0 0 0 0 0 0 0
Y+R:           4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes:          2 0 3 0 1 2 0 3 0 1 2 0 3 0 1 2 0 3 0 1
-----|-----|-----|-----|
Volume Module:
Base Vol:       164 333 467 466 1477 261 220 537 703 504 984 231
Growth Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:    164 333 467 466 1477 261 220 537 703 504 984 231
User Adj:      1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00
PHF Adj:       1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00
PHF Volume:    164 333 0 466 1477 261 220 537 0 504 984 231
Reduct Vol:    0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol:   164 333 0 466 1477 261 220 537 0 504 984 231
PCE Adj:       1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00
MLF Adj:       1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00
FinalVolume:   164 333 0 466 1477 261 220 537 0 504 984 231
-----|-----|-----|-----|
Saturation Flow Module:
Sat/Lane:      1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
Adjustment:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes:         2.00 3.00 1.00 2.00 3.00 1.00 2.00 3.00 1.00 2.00 3.00 1.00
Final Sat.:    3400 5100 1700 3400 5100 1700 3400 5100 1700 3400 5100 1700
-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat:       0.05 0.07 0.00 0.14 0.29 0.15 0.06 0.11 0.00 0.15 0.19 0.14
Crit Moves:    ****          ****          ****          ****
*****

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
*****
Intersection #5 Sand Canyon Ave/I-5 Northbound Ramps
*****
Cycle (sec):          100          Critical Vol./Cap.(X):          0.677
Loss Time (sec):      5            Average Delay (sec/veh):        xxxxxx
Optimal Cycle:        35            Level Of Service:                B
*****
Approach:             North Bound      South Bound      East Bound      West Bound
Movement:             L - T - R      L - T - R      L - T - R      L - T - R
-----|-----|-----|-----|
Control:              Protected      Protected      Protected      Protected
Rights:               Include        Include        Ovl            Include
Min. Green:           0  0  0        0  0  0        0  0  0        0  0  0
Y+R:                  4.0 4.0 4.0    4.0 4.0 4.0    4.0 4.0 4.0    4.0 4.0 4.0
Lanes:                2  0  3  0  1    1  0  3  0  1    1  1  0  0  2    1  0  0  1  0
-----|-----|-----|-----|
Volume Module:
Base Vol:             238  745    2    6 2242  612  391  3  569    1  2  1
Growth Adj:          1.00 1.00 1.00  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:          238  745    2    6 2242  612  391  3  569    1  2  1
User Adj:             1.00 1.00 1.00  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:              1.00 1.00 1.00  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:           238  745    2    6 2242  612  391  3  569    1  2  1
Reduct Vol:           0  0  0        0  0  0        0  0  0        0  0  0
Reduced Vol:          238  745    2    6 2242  612  391  3  569    1  2  1
PCE Adj:              1.00 1.00 1.00  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:              1.00 1.00 1.00  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume:          238  745    2    6 2242  612  391  3  569    1  2  1
OvlAdjVol:                                     331
-----|-----|-----|-----|
Saturation Flow Module:
Sat/Lane:             1700 1700 1700  1700 1700 1700 1700 1700 1700 1700 1700 1700
Adjustment:           1.00 1.00 1.00  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes:                2.00 3.00 1.00  1.00 3.00 1.00 1.98 0.02 2.00 1.00 0.67 0.33
Final Sat.:           3400 5100 1700  1700 5100 1700 3374  26 3400 1700 1133  567
-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat:              0.07 0.15  0.00  0.00 0.44  0.36  0.12 0.12  0.17  0.00 0.00  0.00
OvlAdjV/S:                                     0.10
Crit Moves:          ****                      ****          ****          ****
*****

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Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

 Intersection #6 Sand Canyon Ave/Marine Way

Cycle (sec): 100 Critical Vol./Cap.(X): 0.729
 Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 41 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound								
Movement:	L	T	R	L	T	R	L	T	R	L	T	R						
Control:	Protected			Protected			Protected			Protected								
Rights:	Include			Include			Include			Include								
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0						
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0						
Lanes:	0	0	3	0	1		2	0	3	0	0		0	0	0	0	0	1

Volume Module:

Base Vol:	0	776	222	78	2829	0	0	0	0	423	0	186
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	776	222	78	2829	0	0	0	0	423	0	186
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	776	222	78	2829	0	0	0	0	423	0	186
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	776	222	78	2829	0	0	0	0	423	0	186
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	776	222	78	2829	0	0	0	0	423	0	186

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	5100	1700	3400	5100	0	0	0	0	3400	0	1700

Capacity Analysis Module:

Vol/Sat:	0.00	0.15	0.13	0.02	0.55	0.00	0.00	0.00	0.00	0.12	0.00	0.11
Crit Moves:	****				****					****		

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
*****
Intersection #7 Sand Canyon Ave/I-5 Southbound Ramps
*****
Cycle (sec):          100          Critical Vol./Cap.(X):          0.652
Loss Time (sec):      5            Average Delay (sec/veh):        xxxxxx
Optimal Cycle:        33          Level Of Service:                B
*****
Approach:             North Bound      South Bound      East Bound      West Bound
Movement:             L - T - R      L - T - R      L - T - R      L - T - R
-----|-----|-----|-----|
Control:              Protected      Protected      Protected      Protected
Rights:               Include       Include       Include       Include
Min. Green:           0 0 0         0 0 0         0 0 0         0 0 0 0
Y+R:                  4.0 4.0 4.0   4.0 4.0 4.0   4.0 4.0 4.0   4.0 4.0 4.0
Lanes:                0 0 4 0 1     2 0 4 0 0     2 0 1! 0 1     0 0 0 0 0
-----|-----|-----|-----|
Volume Module:
Base Vol:             0 652 110     740 2428      0 400 0 832    0 0 0
Growth Adj:           1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:          0 652 110     740 2428      0 400 0 832    0 0 0
User Adj:             1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:              1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:           0 652 110     740 2428      0 400 0 832    0 0 0
Reduct Vol:           0 0 0         0 0 0         0 0 0 0        0 0 0
Reduced Vol:          0 652 110     740 2428      0 400 0 832    0 0 0
PCE Adj:              1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:              1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume:          0 652 110     740 2428      0 400 0 832    0 0 0
-----|-----|-----|-----|
Saturation Flow Module:
Sat/Lane:             1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
Adjustment:           1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes:                0.00 4.00 1.00 2.00 4.00 0.00 2.00 0.00 2.00 0.00 0.00 0.00
Final Sat.:           0 6800 1700 3400 6800 0 3400 0 3400 0 0 0
-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat:              0.00 0.10 0.06 0.22 0.36 0.00 0.12 0.00 0.24 0.00 0.00 0.00
Crit Moves:          ****              ****              ****
*****

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 Impact Analysis Report
 Level Of Service

Intersection	Base		Future		Change in
	Del/ LOS	V/ Veh C	Del/ LOS	V/ Veh C	
# 1 Bee Canyon Access Rd/Portola P	A	xxxxxx 0.469	A	xxxxxx 0.469	+ 0.000 V/C
# 2 Sand Canyon Ave/Portola Pwy	A	xxxxxx 0.569	A	xxxxxx 0.569	+ 0.000 V/C
# 3 Sand Canyon Ave/Irvine Blvd	C	xxxxxx 0.710	C	xxxxxx 0.710	+ 0.000 V/C
# 4 Sand Canyon Ave/Trabuco Rd-Gre	B	xxxxxx 0.634	B	xxxxxx 0.634	+ 0.000 V/C
# 5 Sand Canyon Ave/I-5 Northbound	C	xxxxxx 0.700	C	xxxxxx 0.700	+ 0.000 V/C
# 6 Sand Canyon Ave/Marine Way	C	xxxxxx 0.739	C	xxxxxx 0.739	+ 0.000 V/C
# 7 Sand Canyon Ave/I-5 Southbound	C	xxxxxx 0.735	C	xxxxxx 0.735	+ 0.000 V/C

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

 Intersection #1 Bee Canyon Access Rd/Portola Pwy

Cycle (sec): 100 Critical Vol./Cap.(X): 0.469
 Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 22 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	0	1	0	1	0	2	0	0	2	1

Volume Module:

Base Vol:	0	0	0	16	0	46	0	958	0	0	1334	4
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	16	0	46	0	958	0	0	1334	4
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	16	0	46	0	958	0	0	1334	4
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	16	0	46	0	958	0	0	1334	4
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	16	0	46	0	958	0	0	1334	4

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	0	0	0	1700	0	1700	1700	3400	0	0	3400	1700

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.01	0.00	0.03	0.00	0.28	0.00	0.00	0.39	0.00
Crit Moves:						****	****			****		

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
*****
Intersection #2 Sand Canyon Ave/Portola Pwy
*****
Cycle (sec):          100          Critical Vol./Cap.(X):          0.569
Loss Time (sec):      5            Average Delay (sec/veh):          xxxxxx
Optimal Cycle:        27            Level Of Service:          A
*****
Approach:      North Bound      South Bound      East Bound      West Bound
Movement:      L - T - R      L - T - R      L - T - R      L - T - R
-----|-----|-----|-----|
Control:      Protected      Protected      Protected      Protected
Rights:      Ovl      Include      Ignore      Include
Min. Green:      0 0 0      0 0 0      0 0 0      0 0 0
Y+R:      4.0 4.0 4.0      4.0 4.0 4.0      4.0 4.0 4.0      4.0 4.0 4.0
Lanes:      2 0 0 0 2      0 0 0 0 0      0 0 2 0 1      2 0 2 0 0
-----|-----|-----|-----|
Volume Module:
Base Vol:      1018 0 415      0 0 0      0 568 157 179 701 0
Growth Adj:      1.00 1.00 1.00      1.00 1.00 1.00      1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:      1018 0 415      0 0 0      0 568 157 179 701 0
User Adj:      1.00 1.00 1.00      1.00 1.00 1.00      1.00 1.00 0.00 1.00 1.00 1.00
PHF Adj:      1.00 1.00 1.00      1.00 1.00 1.00      1.00 1.00 0.00 1.00 1.00 1.00
PHF Volume:      1018 0 415      0 0 0      0 568 0 179 701 0
Reduct Vol:      0 0 0      0 0 0      0 0 0 0 0 0 0
Reduced Vol:      1018 0 415      0 0 0      0 568 0 179 701 0
PCE Adj:      1.00 1.00 1.00      1.00 1.00 1.00      1.00 1.00 0.00 1.00 1.00 1.00
MLF Adj:      1.00 1.00 1.00      1.00 1.00 1.00      1.00 1.00 0.00 1.00 1.00 1.00
FinalVolume:      1018 0 415      0 0 0      0 568 0 179 701 0
OvlAdjVol:      236
-----|-----|-----|-----|
Saturation Flow Module:
Sat/Lane:      1700 1700 1700      1700 1700 1700      1700 1700 1700 1700 1700 1700
Adjustment:      1.00 1.00 1.00      1.00 1.00 1.00      1.00 1.00 1.00 1.00 1.00 1.00
Lanes:      2.00 0.00 2.00      0.00 0.00 0.00      0.00 2.00 1.00 2.00 2.00 0.00
Final Sat.:      3400 0 3400      0 0 0      0 3400 1700 3400 3400 0
-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat:      0.30 0.00 0.12      0.00 0.00 0.00      0.00 0.17 0.00 0.05 0.21 0.00
OvlAdjV/S:      0.07
Crit Moves:      ****          ****          ****
*****

```

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Sand Canyon Ave/Irvine Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.710
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 38 Level Of Service: C

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different traffic movements and 10 rows of adjustment factors like Base Vol, Growth Adj, etc.

Saturation Flow Module: Table with 12 columns and 4 rows showing Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 12 columns and 3 rows showing Vol/Sat, OvlAdjV/S, and Crit Moves.

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
*****
Intersection #4 Sand Canyon Ave/Trabuco Rd-Great Park Blvd
*****
Cycle (sec):          100          Critical Vol./Cap.(X):          0.634
Loss Time (sec):      5            Average Delay (sec/veh):          xxxxxx
Optimal Cycle:        31            Level Of Service:          B
*****
Approach:      North Bound      South Bound      East Bound      West Bound
Movement:      L - T - R      L - T - R      L - T - R      L - T - R
-----|-----|-----|-----|
Control:        Protected      Protected      Protected      Protected
Rights:         Ignore      Include      Ignore      Include
Min. Green:     0 0 0      0 0 0      0 0 0      0 0 0
Y+R:           4.0 4.0 4.0      4.0 4.0 4.0      4.0 4.0 4.0      4.0 4.0 4.0
Lanes:         2 0 3 0 1      2 0 3 0 1      2 0 3 0 1      2 0 3 0 1
-----|-----|-----|-----|
Volume Module:
Base Vol:      182 1370 908      109 549 156      402 693 197      447 842 281
Growth Adj:   1.00 1.00 1.00      1.00 1.00 1.00      1.00 1.00 1.00      1.00 1.00 1.00
Initial Bse:   182 1370 908      109 549 156      402 693 197      447 842 281
User Adj:     1.00 1.00 0.00      1.00 1.00 1.00      1.00 1.00 0.00      1.00 1.00 1.00
PHF Adj:      1.00 1.00 0.00      1.00 1.00 1.00      1.00 1.00 0.00      1.00 1.00 1.00
PHF Volume:   182 1370 0      109 549 156      402 693 0      447 842 281
Reduct Vol:   0 0 0      0 0 0      0 0 0      0 0 0
Reduced Vol:  182 1370 0      109 549 156      402 693 0      447 842 281
PCE Adj:     1.00 1.00 0.00      1.00 1.00 1.00      1.00 1.00 0.00      1.00 1.00 1.00
MLF Adj:     1.00 1.00 0.00      1.00 1.00 1.00      1.00 1.00 0.00      1.00 1.00 1.00
FinalVolume:  182 1370 0      109 549 156      402 693 0      447 842 281
-----|-----|-----|-----|
Saturation Flow Module:
Sat/Lane:     1700 1700 1700      1700 1700 1700      1700 1700 1700      1700 1700 1700
Adjustment:   1.00 1.00 1.00      1.00 1.00 1.00      1.00 1.00 1.00      1.00 1.00 1.00
Lanes:       2.00 3.00 1.00      2.00 3.00 1.00      2.00 3.00 1.00      2.00 3.00 1.00
Final Sat.:  3400 5100 1700      3400 5100 1700      3400 5100 1700      3400 5100 1700
-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat:     0.05 0.27 0.00      0.03 0.11 0.09      0.12 0.14 0.00      0.13 0.17 0.17
Crit Moves:          ****          ****          ****          ****
*****

```

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 Sand Canyon Ave/I-5 Northbound Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.700
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 37 Level Of Service: C

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different volume categories and 12 rows for various adjustment factors like Base Vol, Growth Adj, etc.

Saturation Flow Module: Table with 12 columns for saturation flow and 4 rows for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 12 columns for capacity analysis and 3 rows for Vol/Sat, OvlAdjV/S, and Crit Moves.

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

 Intersection #6 Sand Canyon Ave/Marine Way

Cycle (sec): 100 Critical Vol./Cap.(X): 0.739
 Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 42 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound										
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected			Protected			Protected			Protected										
Rights:	Include			Include			Include			Include										
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0					
Lanes:	0	0	3	0	1	2	0	3	0	0	0	0	0	0	0	2	0	0	0	1
Volume Module:																				
Base Vol:	0	2616	549	241	1174	0	0	0	0	0	0	0	358	0	96					
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00					
Initial Bse:	0	2616	549	241	1174	0	0	0	0	0	0	0	358	0	96					
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00					
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00					
PHF Volume:	0	2616	549	241	1174	0	0	0	0	0	0	0	358	0	96					
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
Reduced Vol:	0	2616	549	241	1174	0	0	0	0	0	0	0	358	0	96					
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00					
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00					
FinalVolume:	0	2616	549	241	1174	0	0	0	0	0	0	0	358	0	96					
Saturation Flow Module:																				
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700					
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00					
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00					
Final Sat.:	0	5100	1700	3400	5100	0	0	0	0	0	0	0	3400	0	1700					
Capacity Analysis Module:																				
Vol/Sat:	0.00	0.51	0.32	0.07	0.23	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.06					
Crit Moves:	****			****			****			****										

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

 Intersection #7 Sand Canyon Ave/I-5 Southbound Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.735
 Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 41 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	4	0	1	2	0	4	0	0	1	2

Volume Module:

Base Vol:	0	2436	215	615	992	0	746	0	208	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2436	215	615	992	0	746	0	208	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2436	215	615	992	0	746	0	208	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2436	215	615	992	0	746	0	208	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	2436	215	615	992	0	746	0	208	0	0	0

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	4.00	1.00	2.00	4.00	0.00	3.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	0	6800	1700	3400	6800	0	5100	0	1700	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.36	0.13	0.18	0.15	0.00	0.15	0.00	0.12	0.00	0.00	0.00
Crit Moves:	****			****			****					

Impact Analysis Report
Level Of Service

Intersection	Base		Future		Change in
	Del/ LOS	V/ Veh C	Del/ LOS	V/ Veh C	
# 1 Bee Canyon Access Rd/Portola P	A	xxxxxx 0.449	A	xxxxxx 0.449	+ 0.000 V/C
# 2 Sand Canyon Ave/Portola Pwy	A	xxxxxx 0.363	A	xxxxxx 0.363	+ 0.000 V/C
# 3 Sand Canyon Ave/Irvine Blvd	B	xxxxxx 0.693	B	xxxxxx 0.693	+ 0.000 V/C
# 4 Sand Canyon Ave/Trabuco Rd-Gre	C	xxxxxx 0.705	C	xxxxxx 0.705	+ 0.000 V/C
# 5 Sand Canyon Ave/I-5 Northbound	C	xxxxxx 0.712	C	xxxxxx 0.712	+ 0.000 V/C
# 6 Sand Canyon Ave/Marine Way	D	xxxxxx 0.875	D	xxxxxx 0.875	+ 0.000 V/C
# 7 Sand Canyon Ave/I-5 Southbound	C	xxxxxx 0.716	C	xxxxxx 0.716	+ 0.000 V/C

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Bee Canyon Access Rd/Portola Pwy

Cycle (sec): 100 Critical Vol./Cap.(X): 0.449

Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx

Optimal Cycle: 22 Level Of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected
Rights: Include Include Include Include

Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0

Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0

Lanes: 0 0 0 0 0 1 0 1 0 0 1 0 2 0 0 0 0 2 0 1

Volume Module:

Base Vol: 0 0 0 77 0 14 10 1103 0 0 1246 40

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 0 0 0 77 0 14 10 1103 0 0 1246 40

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Volume: 0 0 0 77 0 14 10 1103 0 0 1246 40

Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 0 0 0 77 0 14 10 1103 0 0 1246 40

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

FinalVolume: 0 0 0 77 0 14 10 1103 0 0 1246 40

Saturation Flow Module:

Sat/Lane: 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 0.00 0.00 0.00 1.69 0.00 0.31 1.00 2.00 0.00 0.00 2.00 1.00

Final Sat.: 0 0 0 2877 0 523 1700 3400 0 0 3400 1700

Capacity Analysis Module:

Vol/Sat: 0.00 0.00 0.00 0.03 0.00 0.03 0.01 0.32 0.00 0.00 0.37 0.02

Crit Moves: **** **** ****

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Sand Canyon Ave/Portola Pwy

Cycle (sec): 100 Critical Vol./Cap.(X): 0.363
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 19 Level Of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected
Rights: Ovl Include Ignore Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 2 0 0 0 2 0 0 0 0 0 0 0 2 0 2 0 0

Volume Module:
Base Vol: 134 0 168 0 0 0 0 0 462 362 468 656 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 134 0 168 0 0 0 0 0 462 362 468 656 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00
PHF Volume: 134 0 168 0 0 0 0 0 462 0 468 656 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 134 0 168 0 0 0 0 0 462 0 468 656 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00
FinalVolume: 134 0 168 0 0 0 0 0 462 0 468 656 0
OvlAdjVol: 0

Saturation Flow Module:
Sat/Lane: 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 2.00 0.00 2.00 0.00 0.00 0.00 0.00 2.00 1.00 2.00 2.00 0.00
Final Sat.: 3400 0 3400 0 0 0 0 3400 1700 3400 3400 0

Capacity Analysis Module:
Vol/Sat: 0.04 0.00 0.05 0.00 0.00 0.00 0.00 0.14 0.00 0.14 0.19 0.00
OvlAdjV/S: 0.00
Crit Moves: **** **** ****

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Sand Canyon Ave/Irvine Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.693
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 36 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected
Rights: Ovl Include Include Ignore
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 2 0 3 0 2 2 0 2 0 1 2 0 4 0 1 2 0 3 0 1

Volume Module:
Base Vol: 147 244 259 266 801 135 97 1194 349 540 1088 119
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 147 244 259 266 801 135 97 1194 349 540 1088 119
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00
PHF Volume: 147 244 259 266 801 135 97 1194 349 540 1088 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 147 244 259 266 801 135 97 1194 349 540 1088 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00
FinalVolume: 147 244 259 266 801 135 97 1194 349 540 1088 0
OvlAdjVol: 0

Saturation Flow Module:
Sat/Lane: 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 2.00 3.00 2.00 2.00 2.00 1.00 2.00 4.00 1.00 2.00 3.00 1.00
Final Sat.: 3400 5100 3400 3400 3400 1700 3400 6800 1700 3400 5100 1700

Capacity Analysis Module:
Vol/Sat: 0.04 0.05 0.08 0.08 0.24 0.08 0.03 0.18 0.21 0.16 0.21 0.00
OvlAdjV/S: 0.00
Crit Moves: **** **** **** ****

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Sand Canyon Ave/Trabuco Rd-Great Park Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.705
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 38 Level Of Service: C

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different traffic movements and 10 rows of volume-related metrics.

Saturation Flow Module: Table with 12 columns and 4 rows showing saturation flow and adjustments.

Capacity Analysis Module: Table with 12 columns and 2 rows showing capacity analysis metrics.

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 Sand Canyon Ave/I-5 Northbound Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.712
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 39 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected
Rights: Include Include Ovl Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 2 0 3 0 1 1 0 3 0 1 1 1 0 0 2 1 0 0 1 0

Volume Module:
Base Vol: 296 723 2 6 2423 700 333 2 584 1 2 1
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 296 723 2 6 2423 700 333 2 584 1 2 1
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 296 723 2 6 2423 700 333 2 584 1 2 1
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 296 723 2 6 2423 700 333 2 584 1 2 1
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 296 723 2 6 2423 700 333 2 584 1 2 1
OvlAdjVol: 288

Saturation Flow Module:
Sat/Lane: 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 2.00 3.00 1.00 1.00 3.00 1.00 1.99 0.01 2.00 1.00 0.67 0.33
Final Sat.: 3400 5100 1700 1700 5100 1700 3380 20 3400 1700 1133 567

Capacity Analysis Module:
Vol/Sat: 0.09 0.14 0.00 0.00 0.48 0.41 0.10 0.10 0.17 0.00 0.00 0.00
OvlAdjV/S: 0.08
Crit Moves: ****

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Sand Canyon Ave/Marine Way

Cycle (sec): 100 Critical Vol./Cap.(X): 0.875
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 74 Level Of Service: D

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different volume categories and 12 rows of adjustment factors.

Saturation Flow Module: Table with 12 columns representing saturation flow values and 4 rows of adjustment factors.

Capacity Analysis Module: Table with 12 columns representing capacity analysis values and 2 rows of critical moves.

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Sand Canyon Ave/I-5 Southbound Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.716

Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx

Optimal Cycle: 39 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

-----|-----|-----|-----|

Control: Protected Protected Protected Protected

Rights: Include Include Include Include

Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0

Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0

Lanes: 0 0 4 0 1 2 0 4 0 0 2 0 1! 0 1 0 0 0 0 0

-----|-----|-----|-----|

Volume Module:

Base Vol: 0 659 104 844 2871 0 411 0 829 0 0 0

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 0 659 104 844 2871 0 411 0 829 0 0 0

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Volume: 0 659 104 844 2871 0 411 0 829 0 0 0

Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 0 659 104 844 2871 0 411 0 829 0 0 0

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

FinalVolume: 0 659 104 844 2871 0 411 0 829 0 0 0

-----|-----|-----|-----|

Saturation Flow Module:

Sat/Lane: 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 0.00 4.00 1.00 2.00 4.00 0.00 2.00 0.00 2.00 0.00 0.00 0.00

Final Sat.: 0 6800 1700 3400 6800 0 3400 0 3400 0 0 0

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Capacity Analysis Module:

Vol/Sat: 0.00 0.10 0.06 0.25 0.42 0.00 0.12 0.00 0.24 0.00 0.00 0.00

Crit Moves: **** **** ****

 Impact Analysis Report
 Level Of Service

Intersection	Base		Future		Change in
	Del/ LOS	V/ Veh C	Del/ LOS	V/ Veh C	
# 1 Bee Canyon Access Rd/Portola P	A	xxxxxx 0.477	A	xxxxxx 0.477	+ 0.000 V/C
# 2 Sand Canyon Ave/Portola Pwy	A	xxxxxx 0.571	A	xxxxxx 0.571	+ 0.000 V/C
# 3 Sand Canyon Ave/Irvine Blvd	C	xxxxxx 0.724	C	xxxxxx 0.724	+ 0.000 V/C
# 4 Sand Canyon Ave/Trabuco Rd-Gre	B	xxxxxx 0.645	B	xxxxxx 0.645	+ 0.000 V/C
# 5 Sand Canyon Ave/I-5 Northbound	C	xxxxxx 0.731	C	xxxxxx 0.731	+ 0.000 V/C
# 6 Sand Canyon Ave/Marine Way	D	xxxxxx 0.883	D	xxxxxx 0.883	+ 0.000 V/C
# 7 Sand Canyon Ave/I-5 Southbound	D	xxxxxx 0.823	D	xxxxxx 0.823	+ 0.000 V/C

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Bee Canyon Access Rd/Portola Pwy

Cycle (sec): 100 Critical Vol./Cap.(X): 0.477

Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx

Optimal Cycle: 23 Level Of Service: A

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

-----|-----|-----|-----|

Control: Protected Protected Protected Protected

Rights: Include Include Include Include

Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0

Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0

Lanes: 0 0 0 0 0 1 0 1 0 0 1 0 2 0 0 0 0 2 0 1

-----|-----|-----|-----|

Volume Module:

Base Vol: 0 0 0 4 0 26 0 1008 0 0 1401 0

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 0 0 0 4 0 26 0 1008 0 0 1401 0

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Volume: 0 0 0 4 0 26 0 1008 0 0 1401 0

Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 0 0 0 4 0 26 0 1008 0 0 1401 0

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

FinalVolume: 0 0 0 4 0 26 0 1008 0 0 1401 0

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Saturation Flow Module:

Sat/Lane: 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 0.00 0.00 0.00 1.00 0.00 1.00 1.00 2.00 0.00 0.00 2.00 1.00

Final Sat.: 0 0 0 1700 0 1700 1700 3400 0 0 3400 1700

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Capacity Analysis Module:

Vol/Sat: 0.00 0.00 0.00 0.00 0.00 0.02 0.00 0.30 0.00 0.00 0.41 0.00

Crit Moves: **** **

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Sand Canyon Ave/Portola Pwy

Cycle (sec): 100 Critical Vol./Cap.(X): 0.571
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 27 Level Of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected
Rights: Ovl Include Ignore Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 2 0 0 0 2 0 0 0 0 0 0 0 2 0 2 0 0

Volume Module:
Base Vol: 1002 0 423 0 0 0 0 0 587 156 184 718 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 1002 0 423 0 0 0 0 0 587 156 184 718 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00
PHF Volume: 1002 0 423 0 0 0 0 0 587 0 184 718 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 1002 0 423 0 0 0 0 0 587 0 184 718 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00
FinalVolume: 1002 0 423 0 0 0 0 0 587 0 184 718 0
OvlAdjVol: 239

Saturation Flow Module:
Sat/Lane: 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 2.00 0.00 2.00 0.00 0.00 0.00 0.00 2.00 1.00 2.00 2.00 0.00
Final Sat.: 3400 0 3400 0 0 0 0 3400 1700 3400 3400 0

Capacity Analysis Module:
Vol/Sat: 0.29 0.00 0.12 0.00 0.00 0.00 0.00 0.17 0.00 0.05 0.21 0.00
OvlAdjV/S: 0.07
Crit Moves: **** **** ****

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Sand Canyon Ave/Irvine Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.724
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 40 Level Of Service: C

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different volume metrics and 12 rows of data.

Saturation Flow Module: Table with 12 columns representing saturation flow metrics and 4 rows of data.

Capacity Analysis Module: Table with 12 columns representing capacity analysis metrics and 3 rows of data.

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Sand Canyon Ave/Trabuco Rd-Great Park Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.645
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 32 Level Of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Approach, Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different traffic volumes and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 12 columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 12 columns for Vol/Sat and Crit Moves.

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 Sand Canyon Ave/I-5 Northbound Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.731
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 41 Level Of Service: C

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different traffic movements and 10 rows of volume-related metrics.

Saturation Flow Module: Table with 12 columns representing different traffic movements and 4 rows of saturation flow metrics.

Capacity Analysis Module: Table with 12 columns representing different traffic movements and 3 rows of capacity analysis metrics.

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Sand Canyon Ave/Marine Way

Cycle (sec): 100 Critical Vol./Cap.(X): 0.883
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 78 Level Of Service: D

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 0 0 3 0 1 2 0 3 0 0 0 0 0 0 0 2 0 0 0 1

Volume Module:
Base Vol: 0 2654 936 314 1145 0 0 0 0 645 0 136
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 2654 936 314 1145 0 0 0 0 645 0 136
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 2654 936 314 1145 0 0 0 0 645 0 136
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 2654 936 314 1145 0 0 0 0 645 0 136
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 2654 936 314 1145 0 0 0 0 645 0 136

Saturation Flow Module:
Sat/Lane: 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 3.00 1.00 2.00 3.00 0.00 0.00 0.00 0.00 2.00 0.00 1.00
Final Sat.: 0 5100 1700 3400 5100 0 0 0 0 3400 0 1700

Capacity Analysis Module:
Vol/Sat: 0.00 0.52 0.55 0.09 0.22 0.00 0.00 0.00 0.00 0.19 0.00 0.08
Crit Moves: **** **

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Sand Canyon Ave/I-5 Southbound Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.823
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 57 Level Of Service: D

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 0 0 4 0 1 2 0 4 0 0 2 0 1! 0 1 0 0 0 0 0

Volume Module:
Base Vol: 0 2790 206 693 1155 0 810 0 195 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 2790 206 693 1155 0 810 0 195 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 2790 206 693 1155 0 810 0 195 0 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 2790 206 693 1155 0 810 0 195 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 2790 206 693 1155 0 810 0 195 0 0 0

Saturation Flow Module:
Sat/Lane: 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 4.00 1.00 2.00 4.00 0.00 3.00 0.00 1.00 0.00 0.00 0.00
Final Sat.: 0 6800 1700 3400 6800 0 5100 0 1700 0 0 0

Capacity Analysis Module:
Vol/Sat: 0.00 0.41 0.12 0.20 0.17 0.00 0.16 0.00 0.11 0.00 0.00 0.00
Crit Moves: **** **** ****

 Impact Analysis Report
 Level Of Service

Intersection	Base		Future		Change in
	Del/ LOS	V/ Veh C	Del/ LOS	V/ Veh C	
# 1 Bee Canyon Access Rd/Portola P	A	xxxxxx 0.450	A	xxxxxx 0.450	+ 0.000 V/C
# 2 Sand Canyon Ave/Portola Pwy	A	xxxxxx 0.364	A	xxxxxx 0.364	+ 0.000 V/C
# 3 Sand Canyon Ave/Irvine Blvd	B	xxxxxx 0.694	B	xxxxxx 0.694	+ 0.000 V/C
# 4 Sand Canyon Ave/Trabuco Rd-Gre	C	xxxxxx 0.706	C	xxxxxx 0.706	+ 0.000 V/C
# 5 Sand Canyon Ave/I-5 Northbound	C	xxxxxx 0.713	C	xxxxxx 0.713	+ 0.000 V/C
# 6 Sand Canyon Ave/Marine Way	D	xxxxxx 0.875	D	xxxxxx 0.875	+ 0.000 V/C
# 7 Sand Canyon Ave/I-5 Southbound	C	xxxxxx 0.716	C	xxxxxx 0.716	+ 0.000 V/C

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Bee Canyon Access Rd/Portola Pwy

Cycle (sec): 100 Critical Vol./Cap.(X): 0.450
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 22 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module table with 12 columns representing different volume categories and 12 rows of adjustment factors.

Saturation Flow Module table with 12 columns and 4 rows showing saturation flow rates and adjustments.

Capacity Analysis Module table with 12 columns and 2 rows showing volume per saturation and critical moves.

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
*****
Intersection #2 Sand Canyon Ave/Portola Pwy
*****
Cycle (sec):          100          Critical Vol./Cap.(X):          0.364
Loss Time (sec):      5            Average Delay (sec/veh):        xxxxxx
Optimal Cycle:        19            Level Of Service:              A
*****
Approach:             North Bound      South Bound      East Bound      West Bound
Movement:             L - T - R      L - T - R      L - T - R      L - T - R
-----|-----|-----|-----|
Control:              Protected      Protected      Protected      Protected
Rights:               Ovl           Include        Ignore         Include
Min. Green:           0 0 0         0 0 0         0 0 0         0 0 0 0
Y+R:                  4.0 4.0 4.0   4.0 4.0 4.0   4.0 4.0 4.0   4.0 4.0 4.0
Lanes:                2 0 0 0 2     0 0 0 0 0     0 0 2 0 1     2 0 2 0 0
-----|-----|-----|-----|
Volume Module:
Base Vol:             138 0 168      0 0 0         0 462 366     468 656 0
Growth Adj:           1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:          138 0 168      0 0 0         0 462 366     468 656 0
User Adj:             1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00
PHF Adj:              1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00
PHF Volume:           138 0 168      0 0 0         0 462 0        468 656 0
Reduct Vol:           0 0 0         0 0 0         0 0 0         0 0 0 0
Reduced Vol:          138 0 168      0 0 0         0 462 0        468 656 0
PCE Adj:              1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00
MLF Adj:              1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00
FinalVolume:          138 0 168      0 0 0         0 462 0        468 656 0
OvlAdjVol:            0
-----|-----|-----|-----|
Saturation Flow Module:
Sat/Lane:             1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
Adjustment:           1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes:                2.00 0.00 2.00 0.00 0.00 0.00 0.00 2.00 1.00 2.00 2.00 0.00
Final Sat.:           3400 0 3400 0 0 0 0 3400 1700 3400 3400 0
-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat:              0.04 0.00 0.05 0.00 0.00 0.00 0.00 0.14 0.00 0.14 0.19 0.00
OvlAdjV/S:            0.00
Crit Moves:          ****                      ****          ****
*****

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
*****
Intersection #3 Sand Canyon Ave/Irvine Blvd
*****
Cycle (sec):          100          Critical Vol./Cap.(X):          0.694
Loss Time (sec):      5           Average Delay (sec/veh):        xxxxxx
Optimal Cycle:        37          Level Of Service:                B
*****
Approach:             North Bound      South Bound      East Bound      West Bound
Movement:             L - T - R      L - T - R      L - T - R      L - T - R
-----|-----|-----|-----|
Control:              Protected      Protected      Protected      Protected
Rights:               Ovl           Include        Include        Ignore
Min. Green:           0   0   0       0   0   0       0   0   0       0   0   0
Y+R:                  4.0 4.0 4.0     4.0 4.0 4.0     4.0 4.0 4.0     4.0 4.0 4.0
Lanes:                2  0  3  0  2     2  0  2  0  1     2  0  4  0  1     2  0  3  0  1
-----|-----|-----|-----|
Volume Module:
Base Vol:             147  248  259     266  805  135     97 1194  349     540 1088  119
Growth Adj:           1.00 1.00 1.00     1.00 1.00 1.00     1.00 1.00 1.00     1.00 1.00 1.00
Initial Bse:           147  248  259     266  805  135     97 1194  349     540 1088  119
User Adj:              1.00 1.00 1.00     1.00 1.00 1.00     1.00 1.00 1.00     1.00 1.00 0.00
PHF Adj:               1.00 1.00 1.00     1.00 1.00 1.00     1.00 1.00 1.00     1.00 1.00 0.00
PHF Volume:           147  248  259     266  805  135     97 1194  349     540 1088  0
Reduct Vol:            0   0   0       0   0   0       0   0   0       0   0   0
Reduced Vol:          147  248  259     266  805  135     97 1194  349     540 1088  0
PCE Adj:               1.00 1.00 1.00     1.00 1.00 1.00     1.00 1.00 1.00     1.00 1.00 0.00
MLF Adj:               1.00 1.00 1.00     1.00 1.00 1.00     1.00 1.00 1.00     1.00 1.00 0.00
FinalVolume:          147  248  259     266  805  135     97 1194  349     540 1088  0
OvlAdjVol:              0
-----|-----|-----|-----|
Saturation Flow Module:
Sat/Lane:             1700 1700 1700     1700 1700 1700     1700 1700 1700     1700 1700 1700
Adjustment:           1.00 1.00 1.00     1.00 1.00 1.00     1.00 1.00 1.00     1.00 1.00 1.00
Lanes:                2.00 3.00 2.00     2.00 2.00 1.00     2.00 4.00 1.00     2.00 3.00 1.00
Final Sat.:           3400 5100 3400     3400 3400 1700     3400 6800 1700     3400 5100 1700
-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat:              0.04 0.05 0.08     0.08 0.24 0.08     0.03 0.18 0.21     0.16 0.21 0.00
OvlAdjV/S:              0.00
Crit Moves:          ****              ****              ****  ****
*****

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Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

 Intersection #4 Sand Canyon Ave/Trabuco Rd-Great Park Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.706
 Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 38 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	3	0	1		2	0	3	0	1	

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Volume Module:

Base Vol:	152	317	425	412	1608	235	195	453	732	704	1133	273
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	152	317	425	412	1608	235	195	453	732	704	1133	273
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	152	317	0	412	1608	235	195	453	0	704	1133	273
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	152	317	0	412	1608	235	195	453	0	704	1133	273
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	152	317	0	412	1608	235	195	453	0	704	1133	273

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Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	5100	1700	3400	5100	1700	3400	5100	1700	3400	5100	1700

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Capacity Analysis Module:

Vol/Sat:	0.04	0.06	0.00	0.12	0.32	0.14	0.06	0.09	0.00	0.21	0.22	0.16
Crit Moves:	****			****			****			****		

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
*****
Intersection #5 Sand Canyon Ave/I-5 Northbound Ramps
*****
Cycle (sec):          100          Critical Vol./Cap.(X):          0.713
Loss Time (sec):      5            Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        39          Level Of Service:             C
*****
Approach:             North Bound      South Bound      East Bound      West Bound
Movement:             L - T - R      L - T - R      L - T - R      L - T - R
-----|-----|-----|-----|
Control:              Protected      Protected      Protected      Protected
Rights:               Include       Include       Ovl           Include
Min. Green:           0 0 0         0 0 0         0 0 0         0 0 0 0
Y+R:                  4.0 4.0 4.0   4.0 4.0 4.0   4.0 4.0 4.0   4.0 4.0 4.0
Lanes:                2 0 3 0 1     1 0 3 0 1     1 1 0 0 2     1 0 0 1 0
-----|-----|-----|-----|
Volume Module:
Base Vol:             296 725 2      6 2425 702 335 2 584 1 2 1
Growth Adj:           1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:          296 725 2      6 2425 702 335 2 584 1 2 1
User Adj:             1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:              1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:           296 725 2      6 2425 702 335 2 584 1 2 1
Reduct Vol:           0 0 0         0 0 0         0 0 0         0 0 0
Reduced Vol:          296 725 2      6 2425 702 335 2 584 1 2 1
PCE Adj:              1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:              1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume:          296 725 2      6 2425 702 335 2 584 1 2 1
OvlAdjVol:                                     288
-----|-----|-----|-----|
Saturation Flow Module:
Sat/Lane:             1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
Adjustment:           1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes:                2.00 3.00 1.00 1.00 3.00 1.00 1.99 0.01 2.00 1.00 0.67 0.33
Final Sat.:           3400 5100 1700 1700 5100 1700 3380 20 3400 1700 1133 567
-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat:              0.09 0.14 0.00 0.00 0.48 0.41 0.10 0.10 0.17 0.00 0.00 0.00
OvlAdjV/S:                                     0.08
Crit Moves:          ****              ****              ****              ****
*****

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
*****
Intersection #6 Sand Canyon Ave/Marine Way
*****
Cycle (sec):          100          Critical Vol./Cap.(X):          0.875
Loss Time (sec):      5           Average Delay (sec/veh):        xxxxxx
Optimal Cycle:        74           Level Of Service:                D
*****
Approach:      North Bound      South Bound      East Bound      West Bound
Movement:      L - T - R      L - T - R      L - T - R      L - T - R
-----|-----|-----|-----|
Control:      Protected      Protected      Protected      Protected
Rights:      Include      Include      Include      Include
Min. Green:   0 0 0 0      0 0 0 0      0 0 0 0      0 0 0 0
Y+R:         4.0 4.0 4.0 4.0  4.0 4.0 4.0 4.0  4.0 4.0 4.0 4.0  4.0 4.0 4.0
Lanes:       0 0 3 0 1      2 0 3 0 0      0 0 0 0 0      2 0 0 0 1
-----|-----|-----|-----|
Volume Module:
Base Vol:     0 724 288      92 3019 0 0 0 0 0 793 0 278
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:  0 724 288      92 3019 0 0 0 0 0 793 0 278
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:  0 724 288      92 3019 0 0 0 0 0 793 0 278
Reduct Vol:  0 0 0 0      0 0 0 0 0 0 0 0 0
Reduced Vol: 0 724 288      92 3019 0 0 0 0 0 793 0 278
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 724 288      92 3019 0 0 0 0 0 793 0 278
-----|-----|-----|-----|
Saturation Flow Module:
Sat/Lane:    1700 1700 1700  1700 1700 1700 1700 1700 1700 1700 1700 1700
Adjustment:  1.00 1.00 1.00  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes:       0.00 3.00 1.00  2.00 3.00 0.00 0.00 0.00 0.00 2.00 0.00 1.00
Final Sat.:  0 5100 1700  3400 5100 0 0 0 0 3400 0 1700
-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat:     0.00 0.14 0.17  0.03 0.59 0.00 0.00 0.00 0.00 0.23 0.00 0.16
Crit Moves:  ****          ****          ****
*****

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Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

 Intersection #7 Sand Canyon Ave/I-5 Southbound Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.716
 Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 39 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	4	0	1		2	0	4	0	0	

Volume Module:

Base Vol:	0	659	104	846	2871	0	413	0	829	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	659	104	846	2871	0	413	0	829	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	659	104	846	2871	0	413	0	829	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	659	104	846	2871	0	413	0	829	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	659	104	846	2871	0	413	0	829	0	0	0

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	4.00	1.00	2.00	4.00	0.00	2.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	0	6800	1700	3400	6800	0	3400	0	3400	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.10	0.06	0.25	0.42	0.00	0.12	0.00	0.24	0.00	0.00	0.00
Crit Moves:	****				****				****			

 Impact Analysis Report
 Level Of Service

Intersection	Base		Future		Change in
	Del/ LOS	V/ Veh C	Del/ LOS	V/ Veh C	
# 1 Bee Canyon Access Rd/Portola P	A	xxxxxx 0.477	A	xxxxxx 0.477	+ 0.000 V/C
# 2 Sand Canyon Ave/Portola Pwy	A	xxxxxx 0.573	A	xxxxxx 0.573	+ 0.000 V/C
# 3 Sand Canyon Ave/Irvine Blvd	C	xxxxxx 0.725	C	xxxxxx 0.725	+ 0.000 V/C
# 4 Sand Canyon Ave/Trabuco Rd-Gre	B	xxxxxx 0.646	B	xxxxxx 0.646	+ 0.000 V/C
# 5 Sand Canyon Ave/I-5 Northbound	C	xxxxxx 0.732	C	xxxxxx 0.732	+ 0.000 V/C
# 6 Sand Canyon Ave/Marine Way	D	xxxxxx 0.883	D	xxxxxx 0.883	+ 0.000 V/C
# 7 Sand Canyon Ave/I-5 Southbound	D	xxxxxx 0.824	D	xxxxxx 0.824	+ 0.000 V/C

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
*****
Intersection #1 Bee Canyon Access Rd/Portola Pwy
*****
Cycle (sec):          100          Critical Vol./Cap.(X):          0.477
Loss Time (sec):      5            Average Delay (sec/veh):          xxxxxx
Optimal Cycle:        23            Level Of Service:          A
*****
Approach:      North Bound      South Bound      East Bound      West Bound
Movement:      L - T - R      L - T - R      L - T - R      L - T - R
-----|-----|-----|-----|
Control:        Protected      Protected      Protected      Protected
Rights:         Include      Include      Include      Include
Min. Green:     0 0 0 0      0 0 0 0      0 0 0 0      0 0 0 0
Y+R:           4.0 4.0 4.0      4.0 4.0 4.0      4.0 4.0 4.0      4.0 4.0 4.0
Lanes:         0 0 0 0 0      1 0 1 0 0      1 0 2 0 0      0 0 2 0 1
-----|-----|-----|-----|
Volume Module:
Base Vol:       0 0 0 0      8 0 26      0 1008 0      0 1401 4
Growth Adj:    1.00 1.00 1.00      1.00 1.00 1.00      1.00 1.00 1.00      1.00 1.00 1.00
Initial Bse:    0 0 0 0      8 0 26      0 1008 0      0 1401 4
User Adj:      1.00 1.00 1.00      1.00 1.00 1.00      1.00 1.00 1.00      1.00 1.00 1.00
PHF Adj:       1.00 1.00 1.00      1.00 1.00 1.00      1.00 1.00 1.00      1.00 1.00 1.00
PHF Volume:    0 0 0 0      8 0 26      0 1008 0      0 1401 4
Reduct Vol:    0 0 0 0      0 0 0 0      0 0 0 0      0 0 0 0
Reduced Vol:   0 0 0 0      8 0 26      0 1008 0      0 1401 4
PCE Adj:       1.00 1.00 1.00      1.00 1.00 1.00      1.00 1.00 1.00      1.00 1.00 1.00
MLF Adj:       1.00 1.00 1.00      1.00 1.00 1.00      1.00 1.00 1.00      1.00 1.00 1.00
FinalVolume:   0 0 0 0      8 0 26      0 1008 0      0 1401 4
-----|-----|-----|-----|
Saturation Flow Module:
Sat/Lane:      1700 1700 1700      1700 1700 1700      1700 1700 1700      1700 1700 1700
Adjustment:    1.00 1.00 1.00      1.00 1.00 1.00      1.00 1.00 1.00      1.00 1.00 1.00
Lanes:         0.00 0.00 0.00      1.00 0.00 1.00      1.00 2.00 0.00      0.00 2.00 1.00
Final Sat.:    0 0 0 0      1700 0 1700      1700 3400 0      0 3400 1700
-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat:       0.00 0.00 0.00      0.00 0.00 0.02      0.00 0.30 0.00      0.00 0.41 0.00
Crit Moves:                    ****      ****                      ****
*****

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Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Sand Canyon Ave/Portola Pwy

Cycle (sec): 100 Critical Vol./Cap.(X): 0.573
 Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 27 Level Of Service: A

Approach:	North Bound				South Bound				East Bound			West Bound								
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected				Protected				Protected			Protected								
Rights:	Ovl				Include				Ignore			Include								
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0						
Lanes:	2	0	0	0	2	0	0	0	0	0	0	0	2	0	1	2	0	2	0	0

Volume Module:

Base Vol:	1006	0	423	0	0	0	0	587	160	184	718	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1006	0	423	0	0	0	0	587	160	184	718	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	1006	0	423	0	0	0	0	587	0	184	718	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1006	0	423	0	0	0	0	587	0	184	718	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	1006	0	423	0	0	0	0	587	0	184	718	0
OvlAdjVol:	239											

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	2.00	0.00	0.00	0.00	0.00	2.00	1.00	2.00	2.00	0.00
Final Sat.:	3400	0	3400	0	0	0	0	3400	1700	3400	3400	0

Capacity Analysis Module:

Vol/Sat:	0.30	0.00	0.12	0.00	0.00	0.00	0.00	0.17	0.00	0.05	0.21	0.00
OvlAdjV/S:	0.07											
Crit Moves:	****			****						****		

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Sand Canyon Ave/Irvine Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.725
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 40 Level Of Service: C

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different traffic movements and 10 rows of volume and adjustment factors.

Saturation Flow Module: Table with 12 columns and 4 rows showing saturation flow rates and adjustments.

Capacity Analysis Module: Table with 12 columns and 3 rows showing capacity analysis metrics.

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Sand Canyon Ave/Trabuco Rd-Great Park Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.646
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 32 Level Of Service: B

Table with columns for Approach (North Bound, South Bound, East Bound, West Bound) and Movement (L, T, R). Rows include Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with columns for Vol/Sat and Crit Moves.

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
*****
Intersection #5 Sand Canyon Ave/I-5 Northbound Ramps
*****
Cycle (sec):          100          Critical Vol./Cap.(X):          0.732
Loss Time (sec):      5            Average Delay (sec/veh):        xxxxxx
Optimal Cycle:        41            Level Of Service:                C
*****
Approach:             North Bound      South Bound      East Bound      West Bound
Movement:             L - T - R      L - T - R      L - T - R      L - T - R
-----|-----|-----|-----|
Control:              Protected      Protected      Protected      Protected
Rights:               Include       Include       Ovl           Include
Min. Green:           0  0  0        0  0  0        0  0  0        0  0  0
Y+R:                  4.0 4.0 4.0    4.0 4.0 4.0    4.0 4.0 4.0    4.0 4.0 4.0
Lanes:                2  0  3  0  1    1  0  3  0  1    1  1  0  0  2    1  0  0  1  0
-----|-----|-----|-----|
Volume Module:
Base Vol:             668 2049      2          5 1226  238  826  3  222  1  2  1
Growth Adj:           1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:          668 2049      2          5 1226  238  826  3  222  1  2  1
User Adj:             1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:              1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:           668 2049      2          5 1226  238  826  3  222  1  2  1
Reduct Vol:           0  0  0        0  0  0        0  0  0        0  0  0
Reduced Vol:          668 2049      2          5 1226  238  826  3  222  1  2  1
PCE Adj:              1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:              1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:         668 2049      2          5 1226  238  826  3  222  1  2  1
OvlAdjVol:                                0
-----|-----|-----|-----|
Saturation Flow Module:
Sat/Lane:             1700 1700  1700  1700 1700  1700 1700  1700  1700 1700  1700
Adjustment:           1.00 1.00  1.00  1.00 1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:                2.00 3.00  1.00  1.00 3.00  1.00  1.99 0.01  2.00  1.00 0.67  0.33
Final Sat.:           3400 5100  1700  1700 5100  1700  3388  12  3400  1700 1133  567
-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat:              0.20 0.40  0.00  0.00 0.24  0.14  0.24 0.24  0.07  0.00 0.00  0.00
OvlAdjV/S:                                0.00
Crit Moves:          ****              ****          ****              ****
*****

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
*****
Intersection #6 Sand Canyon Ave/Marine Way
*****
Cycle (sec):          100          Critical Vol./Cap.(X):          0.883
Loss Time (sec):      5            Average Delay (sec/veh):        xxxxxx
Optimal Cycle:        78            Level Of Service:                D
*****
Approach:      North Bound      South Bound      East Bound      West Bound
Movement:      L - T - R      L - T - R      L - T - R      L - T - R
-----|-----|-----|-----|
Control:        Protected      Protected      Protected      Protected
Rights:         Include      Include      Include      Include
Min. Green:     0 0 0      0 0 0      0 0 0      0 0 0
Y+R:           4.0 4.0 4.0  4.0 4.0 4.0  4.0 4.0 4.0  4.0 4.0 4.0
Lanes:         0 0 3 0 1    2 0 3 0 0    0 0 0 0 0    2 0 0 0 1
-----|-----|-----|-----|
Volume Module:
Base Vol:       0 2656  936  314 1147  0  0 0 0  0  645 0 136
Growth Adj:    1.00 1.00  1.00  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:   0 2656  936  314 1147  0  0 0 0  0  645 0 136
User Adj:      1.00 1.00  1.00  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:       1.00 1.00  1.00  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:    0 2656  936  314 1147  0  0 0 0  0  645 0 136
Reduct Vol:    0 0 0      0 0 0      0 0 0 0  0  0 0 0
Reduced Vol:   0 2656  936  314 1147  0  0 0 0  0  645 0 136
PCE Adj:       1.00 1.00  1.00  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:       1.00 1.00  1.00  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
FinalVolume:   0 2656  936  314 1147  0  0 0 0  0  645 0 136
-----|-----|-----|-----|
Saturation Flow Module:
Sat/Lane:      1700 1700  1700  1700 1700  1700 1700 1700  1700 1700 1700
Adjustment:    1.00 1.00  1.00  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Lanes:         0.00 3.00  1.00  2.00 3.00  0.00 0.00 0.00  0.00 2.00 0.00 1.00
Final Sat.:    0 5100  1700  3400 5100  0  0 0 0  0  3400 0 1700
-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat:       0.00 0.52  0.55  0.09 0.22  0.00 0.00 0.00  0.00 0.19 0.00  0.08
Crit Moves:                ****  ****                ****
*****

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Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

 Intersection #7 Sand Canyon Ave/I-5 Southbound Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.824
 Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 58 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	4	0	1	2	0	4	0	0	2	0

Volume Module:

Base Vol:	0	2790	206	695	1155	0	812	0	195	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2790	206	695	1155	0	812	0	195	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2790	206	695	1155	0	812	0	195	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2790	206	695	1155	0	812	0	195	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	2790	206	695	1155	0	812	0	195	0	0	0

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	4.00	1.00	2.00	4.00	0.00	3.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	0	6800	1700	3400	6800	0	5100	0	1700	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.41	0.12	0.20	0.17	0.00	0.16	0.00	0.11	0.00	0.00	0.00
Crit Moves:	****			****			****					
